



5316 Deep Valley Run  
Raleigh, NC 27606  
Phone: 919-859-4544

## **Underground Storage Tank Closure (UST-12)**

for

**Former Service Station  
500 S. Blount St.  
Raleigh, North Carolina**

prepared for:

***N. C. Department of Environment & Natural Resources  
UST Section***

**October 11, 2003**

Geological & Environmental Consulting

Professional Geologist • Registered Environmental Manager • Certified Environmental Inspector

**Underground Storage Tank Closure Report (UST-12)  
Former Service Station  
500 S. Blount Street  
Raleigh (Wake County), North Carolina**

The following Underground Storage Tank (UST-12) Closure Report is submitted in the required format:

**A. General Information**

**1. Facility Information**

- **Former Service Station (recently purchased by City of Raleigh  
No facility ID Number. No USTs were registered at this location  
500 S. Blount St.  
Raleigh, North Carolina 27601  
The facility is located in Wake County.**
- **Date of Report is October 10, 2003**
- **The UST owner is the City of Raleigh (purchased tract shortly before  
removal of the USTs:  
City of Raleigh - Contact: Mr. Greg Pittman  
Real Estate  
P. O. Box 590  
Raleigh, North Carolina 27602  
Phone: (919) 890-3087 (Mr. Greg Pittman)**
- **UST operator is unknown. The property was owned by the Household  
of Ruth and Virtue Lodge.**

**2. Contacts**

- **Mr. Greg Pittman, Real Estate, City of Raleigh at P. O. Box 590,  
Raleigh, NC, 27602. Mr. Pittman's phone number is (919) 890-3087.**
- **GeoLogix, Inc. - (919) 859-4544  
5316 Deep Valley Run  
Raleigh, NC 27606**

## GeoLogix

- **Mr. Rob Livermon - (919) 859-4544**  
**GeoLogix, Inc.**  
**5316 Deep Valley Run**  
**Raleigh, North Carolina 27606**
- **GeoChem, Inc. Environmental Laboratories - (919) 460-8093**  
**2500 Gate Way Centre Boulevard, Suite 300**  
**Morrisville, North Carolina 27560**  
**State Certification Number of GeoChem is No. 336.**

### 3. UST Information

<b>Tank</b>	<b>Installation Date</b>	<b>Size in Gallons</b>	<b>Tank Dimensions</b>	<b>Last Contents</b>	<b>Previous Contents</b>
<b>N/A</b>	<b>Unknown</b>	<b>2,000</b>	<b>L= 14' 0"</b> <b>D= 5' 0"</b>	<b>Gasoline</b>	<b>None known</b>
<b>N/A</b>	<b>Unknown</b>	<b>2,000</b>	<b>L= 14' 0"</b> <b>D= 5' 0"</b>	<b>Gasoline</b>	<b>None known</b>
<b>N/A</b>	<b>Unknown</b>	<b>1,000</b>	<b>L = 11' 6"</b> <b>D = 3' 10"</b>	<b>Used Motor Oil</b>	<b>None known</b>
<b>N/A</b>	<b>Unknown</b>	<b>275</b>	<b>L= 4' 6"</b> <b>D= 3' 4"</b>	<b>Kerosene (?)</b>	<b>None known</b>

### 4. Site Characteristics

- **There are no known past releases at this site location.**
- **Most recently, the office portion of the former service station was being utilized as an office for a towing and parking service. The tenant leasing the space moved from the property in mid-July, 2003. Accordingly, the business was inactive at the time of UST removal. It is believed that the USTs were last used sometime during the 1970's.**
- **The surrounding property is generally urban consisting of residences (single and multi-family), convenience store, lodge hall, car detail shop, parking deck, parking lots, and open areas.**

## GeoLogix

The general geology of this area would be described as metamorphic injected gneisses of the Raleigh Belt. Rocks would generally consist of biotite gneiss and schist intruded by sills and dikes of granite and pegmatite. Soils encountered during excavation of the four USTs consisted of brownish-orange to reddish-brown silty clays. Near the bottom of the post-UST removal excavation, saprolitic material (weathered gneiss and/or granite) was encountered.

- Regarding a receptor survey, a potable water well is located at the Wake County Office Building in the 300 block of Fayetteville Street Mall. It is within 1000 feet of the source area. A detailed receptor survey was not performed since a requirement of at least Phase I of a Limited Site Assessment (LSA) is anticipated. A release was identified during closure of the USTs and associated supply pipelines.

### B. Closure Procedures

1. In preparation for closure, a UST-3 was submitted to the N. C. Department of Environment and Natural Resources (DENR) Central Office and the Raleigh Regional Office by *GeoLogix, Inc.* The City of Raleigh Fire Marshall was notified in advance of the tank excavation, and a Fire Marshall was present at the site during UST removal. The location of a former dispenser island was observed in the parking area, but there were no dispensers situated on the island. OK Enterprises pumped a total of 1,090 gallons of product, fuel/water mixture and sludge from the USTs. There was no product in the underground pipelines. The USTs were transported to OK Enterprises shop in Elon, NC, for later transportation to a scrap metal dealer. The tanks were vacuumed/cleaned out by OK Enterprises on site, so little additional tank cleaning was necessary off of the premises. The small USTs were vented by puncturing the top of the tanks using a trackhoe claw. The tanks were eventually cut up at the OK Enterprises shop and transported to Lee Scrap Iron and Metal, Inc., in Sanford, NC, for disposal.
2. Approximately 1,090 gallons of fuel/water mixture and sludge was pumped from the tanks. Most of the product came from a full (to the neck) used oil tank containing roughly 1,000 gallons. Product was vacuumed from the tanks by OK Enterprises. The materials vacuumed out were transported to the Shamrock Corporation in Brown's Summit, NC, for processing/recycling. Sludge was so tightly packed on the bottom third of the tank that special scraping and steam cleaning was necessary to condition the sludge such that it could be removed.



3. Excavation

- The top of the USTs were uncovered by digging to a depth at the top of the tank. Then, digging began along both sides of the tank until more than one-half of the tank was exposed. Each UST was then rolled from its position and pulled from the excavation. There was generally one large excavation on site. A low, thin wall of soil separated the area where two 2,000-gallon USTs were buried parallel to one another on the front (east) side of the building from the former location of the 1,000-gallon used oil UST. Soil contamination was initially encountered during removal of the two 2,000-gallon gasoline USTs and the 1,000-gallon used oil UST. Excavation beyond what would normally be necessary to excavate the USTs was conducted. During excavation of contaminated soil from around the two 2,000-gallon gasoline USTs and the former dispenser island location, a 275-gallon UST was discovered near the sidewalk at E. Cabarrus St. not far from the intersection of E. Cabarrus St. and S. Blount St. The UST likely contained either gasoline or kerosene when used years ago. The final dimensions of the excavation where all of the USTs, pipelines, and the soil underneath the former dispenser island were removed was not uniform. The longest and widest areas of excavation was approximately 55' long and 30' wide. Obvious soil contamination was also indicated in the excavation made specifically to remove the 1,000-gallon UST. Accordingly, digging beyond what was necessary to excavate that UST was also conducted. The two 2,000-gallon UST's fuel supply lines led from the USTs to dispensers. The used oil UST was apparently filled through a fill pipe/receptacle located at the ground surface near one of the garage bay doors. Supply/product lines which were encountered did not contain product. Any contaminated soil which may have existed around the pipelines was excavated during the excavation project conducted after UST removal. Soils encountered in the UST excavation where the 2,000-gallon gasoline USTs were formerly situated did not appear contaminated until the soils underneath the bottom of the USTs were exposed. A strong petroleum odor was present after the USTs were removed as confirmed by field screening. Lab analyses of soil samples confirmed contamination at nearly every location where UST closure samples were obtained, and some contamination remained after post-UST removal excavations were completed. An inspection of the 2,000-gallon gasoline USTs after removal indicated that the USTs were in poor condition. It appears that much of the contamination in that excavation area may have resulted from rusted/pitted tanks. Other contamination may have originated from leaking pipelines. The 1,000-gallon used oil tank was also in poor condition, as was the 275-gallon UST found later during post-UST removal excavation. A number of holes were observed in those tanks.

On-site readings taken with a Thermo 580B organic vapor monitor indicated soil contamination above action levels in generally all locations after UST removals. The source of the release(s) in the gasoline USTs is thought to be the tanks and possibly the fuel supply pipelines. The used oil and 275-gallon USTs are also thought to have leaked due to their poor condition.

- The tops of the two 2,000-gallon gasoline USTs were buried approximately 2.0 feet beneath ground level. The top of the used oil UST was buried roughly 1.5 feet below ground level. The top of the 275-gallon UST appeared to be located roughly 3.0 feet below the ground level.
- A total of 622.39 cubic yards of soil was excavated during removal of the USTs and the obviously-contaminated soil removed after the USTs were excavated and removed. The excavated contaminated soil was stockpiled to the side of the excavation, and removal to a land farm and/or bio treatment facility began concurrently with soil excavation.
- Soils encountered during removal of the UST were classified as brownish-orange to reddish-brown silty clays typical of soils resulting from weathered injected metamorphosed igneous rocks in this area.
- Clean fill dirt was brought to the site as contracted by OK Enterprises. The source of backfill was tailings from the Wake Stone Quarry in Cary, NC, and from borrow pits used for clean fill and topsoil by Brinley's Grading and various other subcontracted trucking companies. The combined soil and quarry tailings were used to backfill the excavations.
- Visible observations indicated that all four of the USTs removed from the property were in poor condition. Holes and pitted areas were observed.
- No water was observed/encountered in the excavation pit except after a torrential rainshower as excavations were nearing an end.

4. Contaminated Soil

- Visibly contaminated soil was observed during excavation and soil sampling around the used oil UST. The odor of gasoline/petroleum fumes from soil in proximity to the former gasoline tanks, pipelines, and former dispenser island were the best indicators of soil contamination in those areas. Contaminated soil was encountered at generally every sampling point upon removal of all USTs. Excavation of the USTs proceeded according to standard practice. Once soil necessary to facilitate tank removal was excavated, it was obvious that additional soil would ultimately need to be excavated. In addition, instructions from the City of Raleigh representative were that the City desired a "clean site", and to excavate soils accordingly. Excavation continued until either soils were indicated by field screening as not/less contaminated, or until excavation was no longer feasible due to (1) safety or (2) the possibility of affecting the structural integrity of the street/sidewalk.
- Soil removed during excavation of the USTs and post-UST removal was stockpiled adjacent to the excavation areas. Stockpiled soil did not remain on site long as it was removed in a timely manner using a series of dump and tandem trucks. The soils were obviously contaminated from the odors present as well as appearance, but the contamination was confirmed using a Thermo 580B organic vapor monitor. Clean fill material and quarry tailings were used to backfill both excavations.

C. Site Investigation

1. Field Screening

- The physical characteristics of the soil samples generally appeared normal for the Piedmont area, that is, ranging from brown, to orange-tan, to reddish-brown silty clays to saprolitic materials above bedrock. A strong petroleum odor was associated with soils in the excavation.
- Representative samples of soil obtained were placed in plastic baggies and allowed to heat in the sun on the hood of a vehicle or the parking surface. The baggies were then opened and a Thermo 580B organic vapor monitor was used to detect volatilizing product in soil samples.
- It is assumed that the Thermo 580B instrument was calibrated at the offices of EnviroSupply and Services from which it was rented.

- The Thermo 580B indicated soil contamination as confirmed by the later laboratory analyses performed on multiple soils samples. The Thermo 580B recorded some readings higher and some readings lower than the actual laboratory analyses. Some readings on the Thermo 580B for various soil samples "pegged the meter". See table in Section G of this report for selected representative site readings.

2. Documentation of soil sampling

- Based on the length of the 2,000-gallon gasoline tanks and the 1,000-gallon used oil UST, two soil samples were obtained for analysis from near each end of both tanks. The samples were obtained roughly 18-24" into the native soil below the former centerline of the USTs. One soil sample was taken from beneath the newly-discovered 275-gallon UST. Samples were taken from underneath both gasoline dispensers, from underneath the gasoline pipelines, and the gasoline area and used oil area excavated stockpiles. Samples were obtained from a representative core of soil taken from the bucket of the trackhoe, or where safe, using a hand auger. A composite sample of the stockpiled soil was obtained.

For UST closures, soil samples taken from underneath the two 2,000-gallon gasoline USTs were labeled depending upon their orientation. The northernmost UST was called "North-UST", and the location of the sample, depending on whether it was at the east or west end was added as a suffix. For example, the sample from underneath the east end of the northernmost tank was labeled "North-UST-E". Samples taken from both ends of the used oil UST were labeled by noting either the east or west ends of the tanks. Dispenser samples were all taken roughly 18"-24" into native soils below the projected location of the former dispensers in the old dispenser island. A pipeline sample was taken underneath the gasoline pipeline between the top of the gasoline tanks and the former dispenser island area. The soil underneath the gasoline pipeline(s) was removed during excavations following tank removal.

Due to the volume of contaminated soil on site as anticipated from on-site field analyses, and due to directions from City of Raleigh personnel, excavation of contaminated soil began almost concurrently with completion of UST closure excavations. After soil excavation concluded late on the second day on site, soil samples were taken, as directed by DENR Raleigh Regional Office UST Section personnel, for analysis using Purgeable Organic Compounds and Aliphatic and Aromatic compounds by EPA Methods 8260 and VPH for gasoline associated samples, and Methods 8260, VPH, 8270 b/n, and EPH for used oil samples.

Samples earmarked for 8260 and VPH analyses were obtained using En Core samplers. Samples to be analyzed by other methods were obtained by hand auger, trackhoe bucket, or grab composites and placed in soil jars. All samples were kept on ice in a cooler for later transportation to the environmental analytical laboratory. The locations of the samples obtain for post-excavation analyses is depicted in the Figures in Section F of this report. As for post-excavation sampling, according to instructions from Raleigh Regional Office UST Section personnel, soil samples were taken generally from the base of the excavation sidewalls.

Samples from the base of the excavation wall were taken at the south end of the excavation where the used oil tank was previously located, and in the north end of the excavation where the small kerosene (?) UST was found and removed. Those two soil samples were analyzed using Methods 8260, VPH, 8270 b/n, and EPH.

Soil samples were taken roughly every twenty (20) feet along the base of the excavation sidewalls. Samples were obtained from the excavation bottom.

- Soil samples were obtained from underneath both ends and the center of where the 2,000-gallon gasoline USTs were located, from underneath both ends of the used oil UST, and one was obtained from underneath the small kerosene (?) UST previously located near the intersection corner. Soil samples were obtained from one location along the former gasoline supply pipelines. There was no used oil pipeline. A fill cap/pipe was located in the concrete in front of Bay No. 1. Composite soil samples were obtained from the stockpiled material.
- Closure soil samples from the UST excavation pits and underneath the supply lines using the bucket of the trackhoe, or where safe, were obtained with a hand auger. Stockpile samples were composites taken from six locations in the each stockpile.
- For all four USTs, closure soil samples from the excavation pits were obtained roughly 18-24" into native soil below the centerline of each former UST location, supply pipeline, and former dispenser location.
- The samples from underneath the USTs, the supply pipelines, from underneath dispensers, and from stockpiles were obtained on the dates and at the times noted on the chain-of-custody records contained in Appendix F of this report.

- The soil samples were taken from underneath both ends of the two 2,000-gasoline USTs, and from underneath both ends of the 1,000-gallon used oil UST. One sample was taken from beneath the kerosene (?) UST. The soil samples are entitled according to the location where they were taken in accordance with the sketch later in this UST-12 report. Samples beneath USTs were generally obtained between 18-24" below the former tank location. The pipeline sample was taken roughly 18-24" below the gasoline supply pipeline.
  - Please see combined Table Nos. 2 & 3 in Section G of this report for a synopsis of soil sample analyses results. Lab results for both (1) UST closure samples and (2) post-UST soil removal excavation samples are also contained in Appendix G of this report.
3. Groundwater sampling information
- No surface water or groundwater samples were obtained as part of the UST closure. No surface or groundwater was encountered.
4. Quality control measures
- Some soil samples were placed in zip-loc bags on site for field analyses using the GeoTherm. Compliance UST closure samples and post-excavation samples were placed in soil jars (with the exception of Method 8260 and VPH samples stored in En Core samplers) and placed in a cooler with ice on site. Samples obtained from the site were transported to GeoChem Environmental Laboratories for analyses.
  - The trackhoe bucket and/or hand auger was used to obtain soil samples from underneath USTs, pipelines, dispensers, and for the post-UST removal soil excavation. A hand auger or using a clean hand trowel to obtain closure samples (TPH 3550 and 5030) from a clean core of soil in a trackhoe bucket were used to obtain soil samples. The hand auger inside and hand trowel were cleaned between sampling using clean cloths and a solution of hexane.
  - Soil samples were submitted to GeoChem Laboratories on August 1, 2003. See Appendix F for lab chain-of-custody copies.
  - No samples were collected for quality control, and accordingly, there was no effect on any observations made at the site.

5. Investigative results

- For closure samples, soil samples obtained from underneath the gasoline USTs and associated dispensers and pipelines were analyzed using TPH 5030. Soil samples obtained from underneath the small kerosene (?) UST and used oil UST were analyzed using both TPH 3550 and TPH 5030. Chromium and lead analyses were conducted on soil samples associated with the used oil UST.

For post-excavation samples, soil samples obtained from the sidewalls and bottom of the excavation were analyzed using Methods 8260 and VPH. Soil samples obtained from the excavation sidewalls and bottom of the excavation in proximity to the former locations of the kerosene (?) and used oil USTs were analyzed using Methods 8260, VPH, 8270 b/n, and EPH.

- Three of the four soil samples taken from underneath the two 2,000-gallon gasoline USTs indicated levels above 10 mg/kg for TPH 5030. The gasoline pipeline sample and dispenser (southeast) sample were also above 10 mg/kg. The sample taken from below the kerosene (?) UST previously located near the street corner exhibited 1,210 mg/kg for TPH 3550, and 1,767 mg/kg for TPH 5030. The sample taken from the east end of the Used Oil UST indicated 225 mg/kg for TPH 3550, and 143 mg/kg for TPH 5030. The sample taken from the west end of the Used Oil UST indicated 432 mg/kg for TPH 3550, and 209 mg/kg for TPH 5030. There was no used oil pipeline from which to obtain a sample.

Soil samples associated with the used oil UST were analyzed for chromium and lead. All samples indicated results of Below Detectable Limits (BDL) for chromium. However, one sample indicated the presence of lead. The highest level was 164.4 mg/kg indicated in the used oil stockpile sample. This result was for "total lead". A later TCLP analysis was run on a composite sample of the soil by Earth Tech, one of the two vendors used to receive the contaminated soil. The TCLP indicated that the leachable lead in the soil was less than 0.0113. Please see Table 2 & 3 in Section G for sample analyses results from the UST closure and post-closure excavation samples. The results of the samples apparently point to further action in the form of Phase I of a Limited Site Assessment (LSA).

- No samples were collected for quality control. Thus, there was no effect on interpretations of soil analytical results.

D. Conclusions and Recommendations

Based on sample analyses, field measurements, and visual observations made during UST closure, soil contamination was identified during excavation/closure of the tanks. Releases appear to have occurred from the two 2,000-gallon USTs. It also appears that releases occurred near the ground surface from around the fill ports and from the supply line piping from the USTs to the dispensers. The two 2,000-gallon USTs were in poor condition. Upon excavation of the USTs which previously contained kerosene (?) and used oil, contaminated soil was visible in soils in proximity to the excavations. The USTs were in poor condition. A number of various size holes were present in both. Leaks could also have occurred from the pipeline serving the kerosene (?) UST previously located near the intersection of E. Cabarrus Street and S. Blount Street.

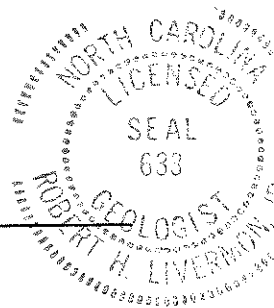
At the direction of City of Raleigh personnel, excavation of contaminated soils continued after UST removal was accomplished. The goal of the City of Raleigh was to have a "clean site" at this location. As soil excavation proceeded, the strong petroleum odors present, confirmed by field measurements, indicated that petroleum hydrocarbon contamination persisted in soils and saprolitic material (beyond soils) in the excavation walls and below the former location of the USTs.

When it became apparent that a "clean site" would likely not be achieved, soil excavation was halted for (1) safety reasons, and (2) due to the potential to affect the structural stability of adjacent sidewalks and streets. Laboratory analyses indicated that petroleum hydrocarbon contamination exceeded the regulatory threshold levels of 10 mg/kg for both TPH 3550 and TPH 5030 in a number of the samples taken for the UST closures. Post-excavation samples using Methods 8260, 8270 b/n, EPH, and VPH also indicated that a clean site had not been achieved as regulatory thresholds for post-excavation samples were exceeded, especially at the north end of the excavation near the street intersection. Accordingly, it appears that Phase I of a Limited Site Assessment (LSA) will be required in accordance with State of N. C. guidelines. The likelihood of requirement of an LSA has already been related to the City of Raleigh.

E. Signature and Seal of Professional Engineer or Licensed Geologist



Robert H. Livermon, Jr., P. G.



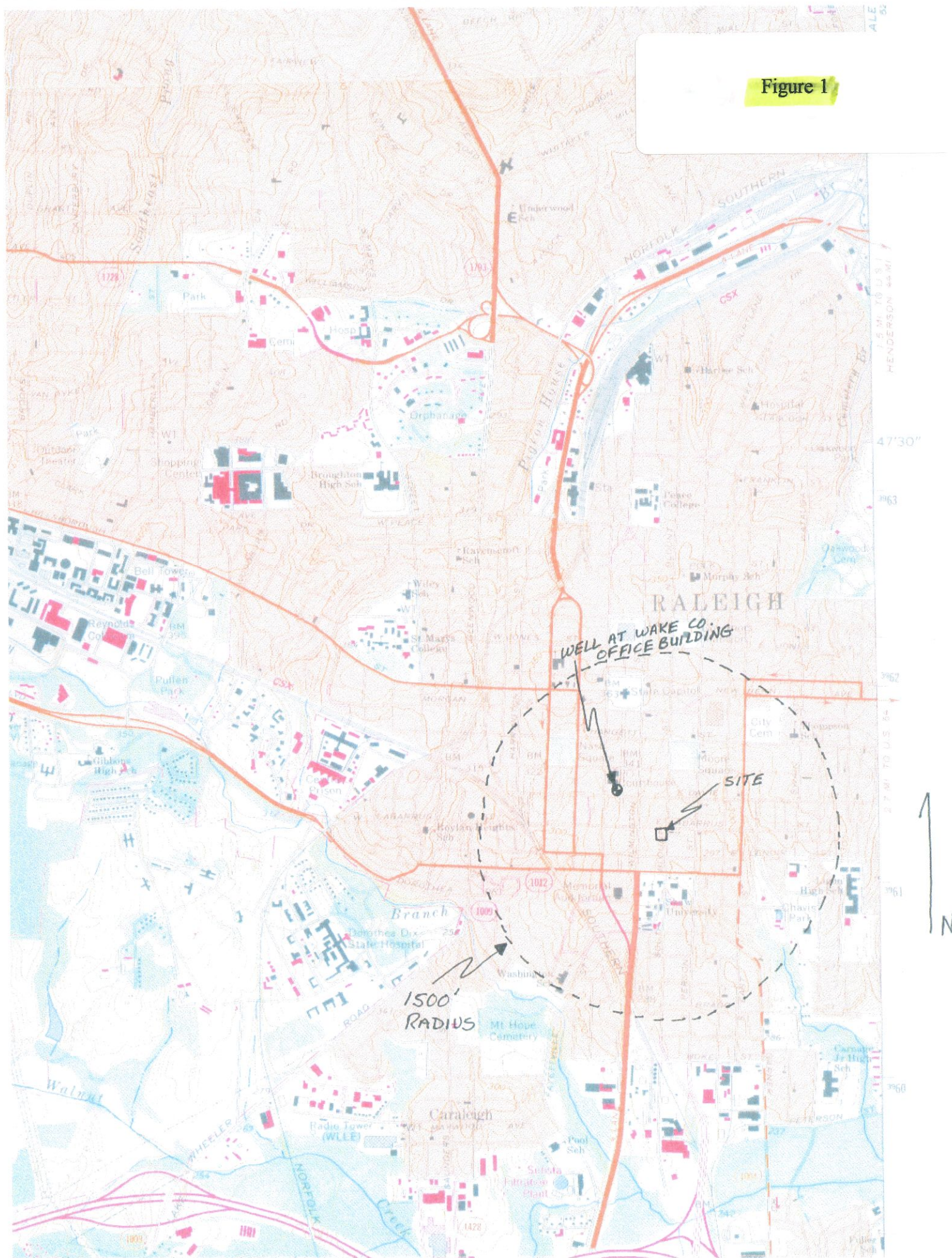


F. Figures

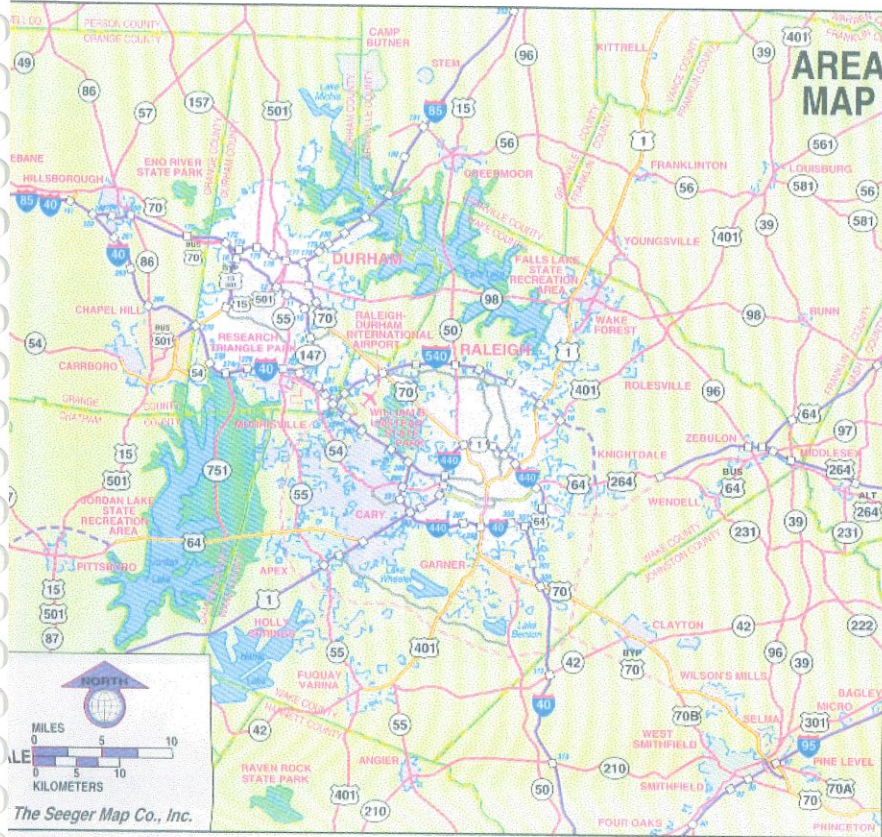
1. See attached copy of USGS Topographic Map of the Raleigh West Quadrangle for requested information.
2. Please see attached sketch of the tank excavation areas for the required information.
3. Please see attached sketch depicting the analytical results in relation to the USTs, fuel supply/return pipelines, and dispenser island areas.



Figure 1



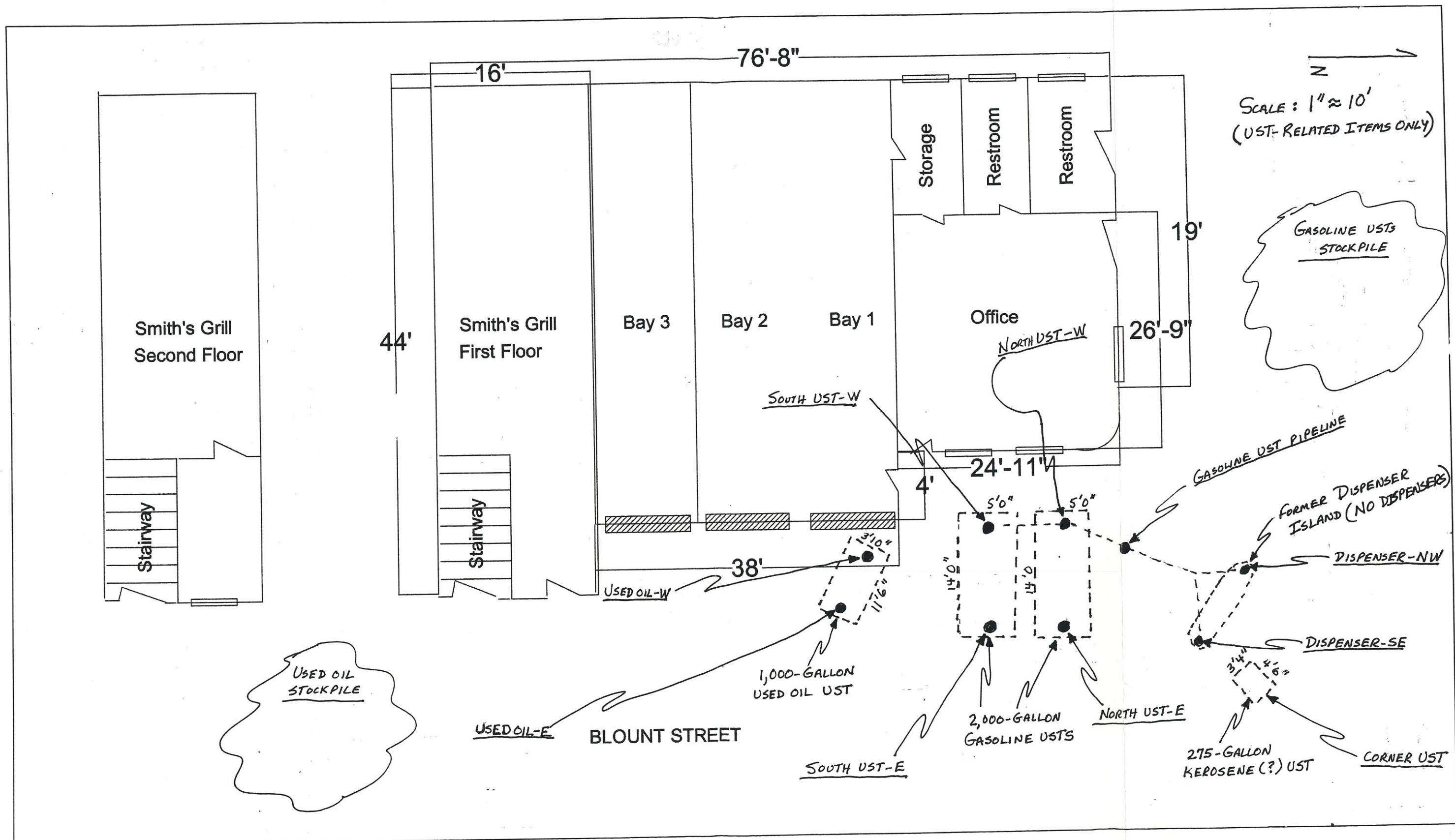






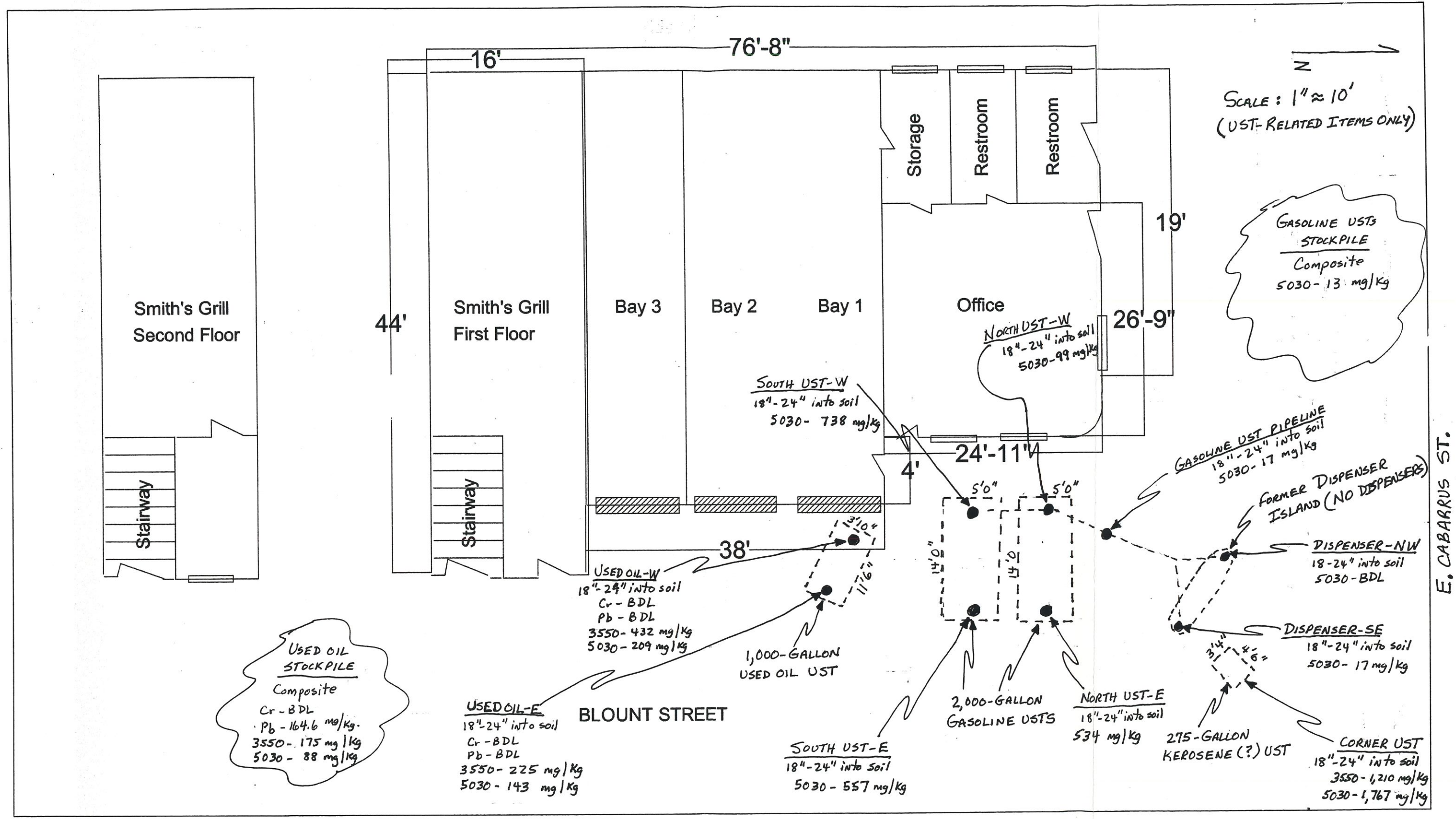
**FIGURE F.2**  
**UST CLOSURE INFORMATION**

FORMER GASOLINE STATION  
 500 S. BLOUNT ST.  
 RALEIGH, NC




**FIGURE F.3**  
**UST CLOSURE INFORMATION**

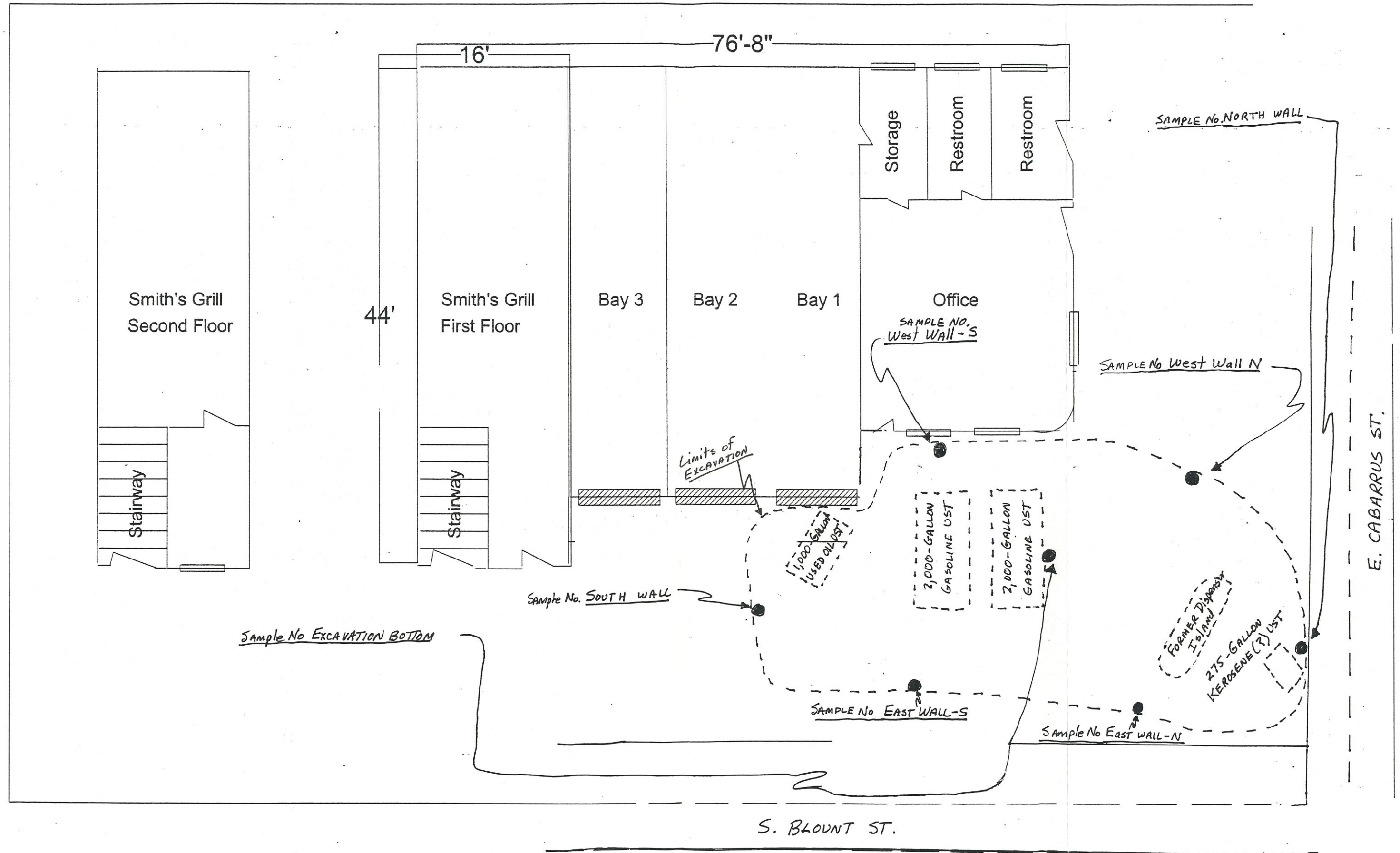
FORMER GASOLINE STATION  
 500 S. BLOUNT ST.  
 RALEIGH, NC





**FIGURE F. 2**  
**POST-EXCAVATION SAMPLES**

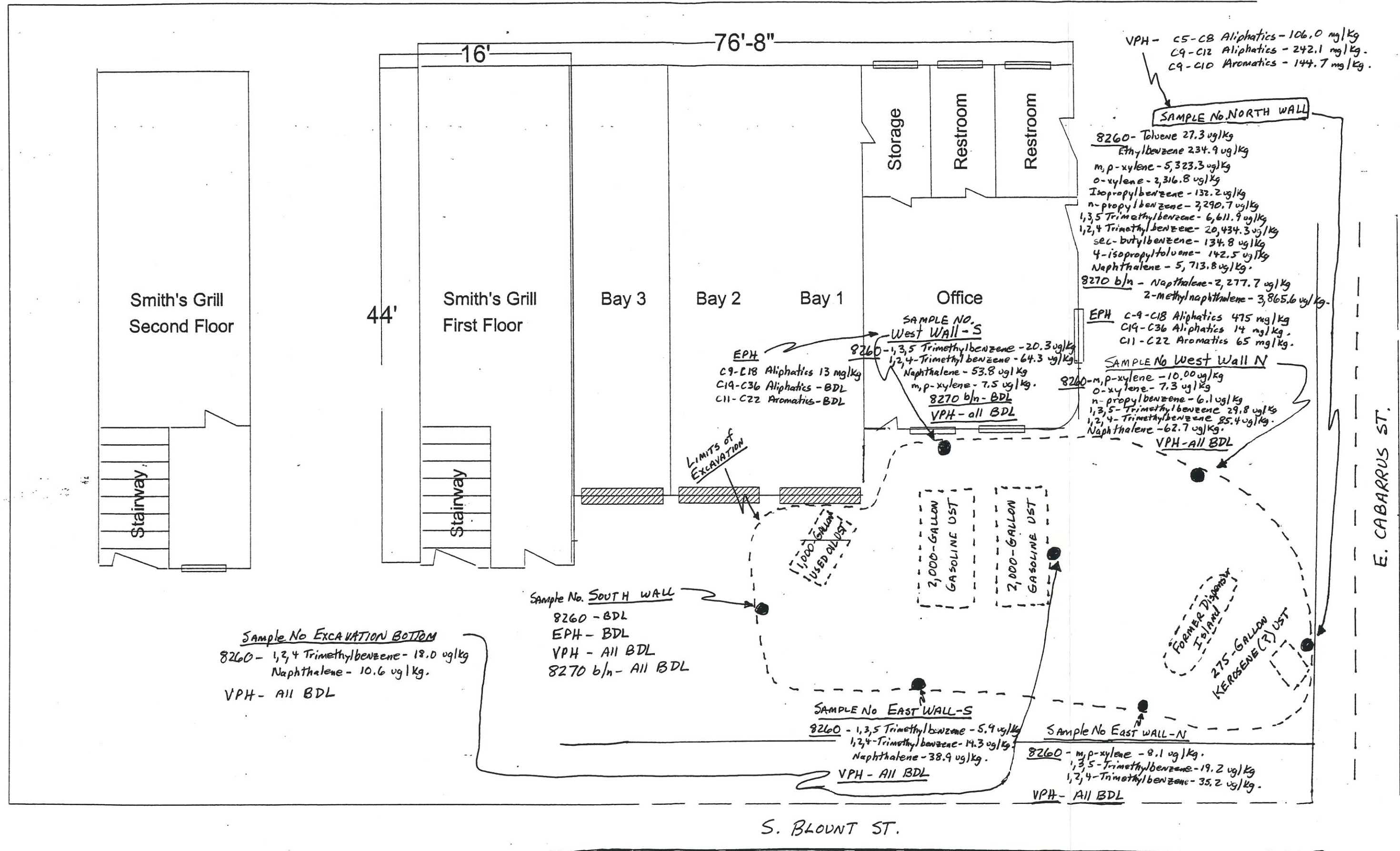
FORMER GASOLINE STATION  
500 S. BLOUNT ST.  
RALEIGH, NC  
SCALE: 1" = 10' 





**FIGURE F.3**  
**POST-EXCAVATION SAMPLES**

FORMER GASOLINE STATION  
500 S. BLOUNT ST.  
RALEIGH, NC  
SCALE: 1" = 10' →



G. Tables

1. A Thermo 580B (Serial No. 60696-328) organic vapor monitor was used to screen soil samples taken at the site. A sample of the many on-site readings taken during post-closure excavation is shown below:

Sample Location	Thermo 580B Reading (ppm)
Exc. North Wall	331
Exc. North Wall	418
Exc. West Wall	52
Exc. West Wall	32
Exc. South Wall	4
Exc. South Wall	4
Exc. East Wall	17
Exc. East Wall	14
Exc. Bottom	7
Exc. Bottom	13



G. (Continued)

**TABLE 2 and 3** (information requested has been combined into the following tables)

Sample Identification No.	Date Sample Obtained	Lab Analysis Performed	Depth Sample Obtained	Analysis Results mg/kg
North-UST-E	7-28-03	TPH 5030	18-24" into soil at east end of northern tank	TPH 5030- 534
North-UST-W	7-28-03	TPH 5030	18-24" into soil at west end of northern tank	TPH 5030- 99
South-UST-W	7-28-03	TPH 5030	18-24" into soil at west end of southern tank	TPH 5030- 738
South-UST-E	7-28-03	TPH 5030	18-24" into soil at east end of southern tank	TPH 5030- 557
Gas Pipeline	7-28-03	TPH 5030	18-24" into soil beneath pipeline	TPH 5030 - 17
Gas Dispenser-NW	7-28-03	TPH 5030	18-24" into soil under island	TPH 5030 - BDL
Gas Dispenser-SE	7-28-03	TPH 5030	18-24" into soil under island	TPH 5030 - 17
Kerosene (?) UST @ corner	7-28-03	TPH 3550 TPH 5030	18-24" beneath east end of tank	TPH 3550- 1,210 TPH 5030 -1,767
Used Oil - E	7-28-03	TPH 3550 TPH 5030 Cr Pb	18-24" beneath east end of tank	TPH 3550- 225 TPH 5030 - 143 Cr - BDL Pb - BDL

GeoLogix

<b>Used Oil - W</b>	<b>7-28-03</b>	<b>TPH 3550 TPH 5030 Cr Pb</b>	<b>18-24" beneath west end of tank</b>	<b>TPH 3550- 432 TPH 5030 - 209 Cr - BDL Pb - BDL</b>
<b>Used Oil - Pipeline</b>	<b>7-28-03</b>	<b>TPH 3550 TPH 5030 Cr Pb</b>	<b>18-24" beneath pipeline</b>	<b>TPH 3550- 6,077 TPH 5030 - 553 Cr - BDL Pb - 306.6</b>
<b>Gasoline Excavation - Stockpile No. 1</b>	<b>7-28-03</b>	<b>TPH 5030</b>	<b>Composite of six locations</b>	<b>TPH 5030 - 13</b>
<b>Used Oil UST Excavation - Stockpile</b>	<b>7-28-03</b>	<b>TPH 3550 TPH 5030 Cr Pb</b>	<b>Composite of six locations</b>	<b>TPH 3550 - 175 TPH 5030 - 88 Cr - BDL Pb - 164.4</b>

**POST-EXCAVATION SAMPLES**

<b>Sample Location/ Identification</b>	<b>Depth Sample Obtained</b>	<b>Analysis Performed/Results</b>
West Wall - N	13.0'	VPH - BDL 8260 - BDL
West Wall - S	14.0'	VPH - BDL 8260 - m,p-Xylene 7.5 ug/kg 1,3,5-Trimethylbenzene - 20.0 ug/kg 1,2,4 - Trimethylbenzene - 64.3 ug/kg Naphthalene 53.8 ug/kg 8270 b/n - BDL EPH - C9-C18 Aliphatics - 13 mg/kg C19-C36 Aliphatics - BDL C11-C22 Aliphatics - BDL
North Wall	13.5'	VPH - C5-C8 Aliphatics 106.0 mg/kg C9-C12 Aliphatics 242.1 mg/kg C9-C10 Aromatics 144.7 mg/kg 8260 - Toluene - 27.3 ug/kg Ethylbenzene - 234.9 ug/kg m,p-Xylene - 5323.3 ug/kg o-Xylene - 2316.8 ug/kg Isopropylbenzene - 132.2 ug/kg n-propylbenzene - 2290.7 ug/kg 1,3,5-Trimethylbenzene - 6611.9 ug/kg 1,2,4-Trimethylbenzene - 20,434.3 ug/kg sec-Butylbenzene - 134.8 ug/kg 4- Isopropyltoluene - 142.5 ug/kg Naphthalene - 5,713.8 ug/kg 8270 b/n - Naphthalene - 2,277.7 ug/kg 2-Methylnaphthalene - 3,865.6 ug/kg EPH - C9-C18 Aliphatics - 475 mg/kg C19-C36 Aliphatics - 14 mg/kg C11-C22 Aliphatics - 65 mg/kg
East Wall - N	13.0'	VPH - BDL 8260 - m,p-Xylene - 8.1 ug/mg 1,3,5-Trimethylbenzene - 19.2 ug/kg 1,2,4-Trimethylbenzene - 35.2 ug/kg
East Wall - S	13.5'	VPH - BDL 8260 - 1,3,5 Trimethylbenzene - 5.9 ug/kg 1,2,4 Trimethylbenzene - 19.3 ug/kg Naphthalene - 38.9 ug/kg

GeoLogix

South Wall	13.5'	VPH - BDL 8260 - BDL 8270 b/n - BDL EPH - BDL
Pit Exc. Bottom	14.5'	VPH - BDL 8260 - 1,2,4-Trimethylbenzene - 18.0 mg/kg Naphthalene - 10.6 mg/kg

## **APPENDIX A**

**Notification of Intent:  
UST Permanent Closure or Change-in-Service  
(Form UST-3)**

**None of the USTs were operated under a permit or obtained a facility identification number. Accordingly, no UST-3 or UST-2 Forms were submitted**



## **APPENDIX B**

**Site Investigation Report for Permanent Closure or  
Change-in-Service of UST  
(Form UST-2)**

**None of the USTs were operated under a permit or obtained a facility identification number. Accordingly, no UST-3 or UST-2 Forms were submitted**



## **APPENDIX C**

### **Site Specific Health and Safety Plan (HASP)**

**No specific Health & Safety Plan was prepared for this project**

**APPENDIX D**

**Certificate of UST Disposal**

**OKE Job #**

City of Raleigh  
500 S. Blount Street  
Raleigh, North Carolina

919 859 4544

TAKE #	Capacity	Previous Contents
1	2000 gal.	Gasoline
2	2000 gal	Gasoline
3	1000 gal	GSE0 Motor oil
4	275 gal	GASOLINE?

7/28/03  
Date

Signature Justin Brock Date 7/25/03

Signature Quint Cook Date 8/24/03



## **APPENDIX E**

### **Soil, Water and Sludge Disposal Manifests**

**OK Enterprises, Inc.**

1301 Princeton Drive \* Elon, NC \* 336-697-9447

**NON-HAZARDOUS WASTE MANIFEST**Manifest # 727

OKE Job #

Generator:

City of Raleigh  
500 Blount St  
Raleigh NCDate: 7/28/03Phone #: 919-859-4540EPA ID #: N/AProcess which generated material: UST Removal

I certify that the materials described below are properly classified, packaged, marked, and labeled, and are in the proper condition to be transported as specified by the DOT. I certify that the material described below is not hazardous waste in accordance with the EPA. I certify that the specific material was delivered to the carrier named below for transport to the facility indicated.

Date: 7/28/03Signature: [Signature]

Proper Shipping Name Description of Material	Haz Class	DOT ID #	Qty.	Circle Unit Gallon Tons Other	Container # Type Tanker Other
<u>WATER</u> <u>USED motor oil</u>	<u>/</u>	<u>/</u>	<u>1090</u>	<u>Gallon</u>	<u>Tanker</u>

Transporter: OK Enterprises, Inc.

1301 Princeton Drive

Elon, NC 27244

Phone #: 336-697-9447

EPA #: N/AVehicle License #: AL-1859Unit #: 95/306Container: VAC. Tanker**Transporter Certification:**

Transporter certifies that the specified material was transferred in a registered (licensed) vehicle to the facility named and was accepted.

Facility:

Shoreline Corp  
6106 Long Point Drive  
Greensboro NCPhone #: 544Contact: 875/187

Handling Method: \_\_\_\_\_

**Facility Certification:**

I certify that the transporter above delivered the specified material to this facility and was handled in the above listed handling method. We are authorized and qualified by the State of \_\_\_\_\_ to handle this material.

Signature: [Signature]Date: 7/31/03

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**NCDENR-DWM PERMIT # SR-RRO-004****Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐Av Gas ☐Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐Kerosene ☐Diesel ☒Varsol ☐Naptha ☐#2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐#5 Fuel Oil ☐#6 Fuel Oil ☐Motor Oil ☐Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐Used Oil ☐

Manifest #

Telephone: (919) 859-4544

**Contractor:**

Geologix

5316 Deep Valley Run

Raleigh, NC 27606

**Generator:**

City of Raleigh

500 S. Blount Street

Raleigh, NC 27601

**Transporter:**

Brinley's Trucking, Inc.

3611 Cessna Drive

Garner, NC 27529

**Truck #:**

KT1

**Gross Weight: 54600****Tare Weight: 23500****Net Weight: 31100****Date & Time Weighed:**

07/29/03

**Equivalent Tons: 15.6****(See Attached Weight Ticket)****Inspected & Accepted by:****Date Received:**Tania Buchanan**(For SOILWORKS, INC.)**7/29/03

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**NCDENR-DWM PERMIT # SR-RRO-004****Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐Av Gas ☐Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐Kerosene ☐Diesel ☒Varsol ☐Naptha ☐#2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐#5 Fuel Oil ☐#6 Fuel Oil ☐Motor Oil ☐Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐Used Oil ☐

Manifest #

2

Telephone: (919) 859-4544

**Contractor:**

Geologix

5316 Deep Valley Run

Raleigh, NC 27606

**Generator:**

City of Raleigh

500 S. Blount Street

Raleigh, NC 27601

**Transporter:**

Brinley's Trucking, Inc.

3611 Cessna Drive

Garner, NC 27529

**Gross Weight: 58760****Truck #:**

KT1

**Tare Weight: 23500****Net Weight: 35260****Date & Time Weighed:**

07/29/03

**Equivalent Tons: 17.6****(See Attached Weight Ticket)****Inspected & Accepted by:**Laura Buchanan**(For SOILWORKS, INC.)****Date Received:**7/29/03



**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**NCDENR-DWM PERMIT # SR-RRO-004****Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐Av Gas ☐Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐Kerosene ☐Diesel ☒Varsol ☐Naptha ☐#2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐#5 Fuel Oil ☐#6 Fuel Oil ☐Motor Oil ☐Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐Used Oil ☐Manifest # **3**

Telephone: (919) 859-4544

**Contractor:**

Geologix

5316 Deep Valley Run

Raleigh, NC 27606

**Generator:**

City of Raleigh

500 S. Blount Street

Raleigh, NC 27601

**Transporter:**

Brinley's Trucking, Inc.

3611 Cessna Drive

Garner, NC 27529

**Truck #:**

KT1

**Gross Weight: 52060****Tare Weight: 23500****Net Weight: 28560****Date & Time Weighed:**

07/29/03

**Equivalent Tons: 14.3****(See Attached Weight Ticket)****Inspected & Accepted by:****Date Received:**Laura Bychara  
7/29/03**(For SOILWORKS, INC.)**

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**NCDENR-DWM PERMIT # SR-RRO-004****Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐ Av Gas ☐ Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐ Kerosene ☐ Diesel ☒  
Varsol ☐ Naptha ☐ #2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐ #5 Fuel Oil ☐ #6 Fuel Oil ☐  
Motor Oil ☐ Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐ Used Oil ☐

Manifest #

4

Telephone:

(919) 859-4544

**Contractor:**Geologix  
5316 Deep Valley Run  
Raleigh, NC 27606**Generator:**City of Raleigh  
500 S. Blount Street  
Raleigh, NC 27601**Transporter:**Brinley's Trucking, Inc.  
3611 Cessna Drive  
Garner, NC 27529

Gross Weight: 52860

**Truck #:**

KT1

Tare Weight: 23500

Net Weight: 29360

**Date & Time Weighed:**

07/29/03

Equivalent Tons: 14.7

(See Attached Weight Ticket)

**Inspected & Accepted by:**

(For SOILWORKS, INC.)

**Date Received:**Diana Buchanan  
7/29/03

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**NCDENR-DWM PERMIT # SR-RRO-004****Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐Av Gas ☐Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐Kerosene ☐Diesel ☒Varsol ☐Naptha ☐#2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐#5 Fuel Oil ☐#6 Fuel Oil ☐Motor Oil ☐Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐Used Oil ☐

Manifest #

5

Telephone: (919) 859-4544

**Contractor:**

Geologix

5316 Deep Valley Run

Raleigh, NC 27606

**Generator:**

City of Raleigh

500 S. Blount Street

Raleigh, NC 27601

**Transporter:**

Brinley's Trucking, Inc.

3611 Cessna Drive

Garner, NC 27529

Gross Weight: 58000

**Truck #:**

MC4

Tare Weight: 24500

Net Weight: 33500

**Date & Time Weighed:**

07/29/03

Equivalent Tons: 16.7

(See Attached Weight Ticket)

**Inspected & Accepted by:****Date Received:**Laura Buchana  
7/29/03

(For SOILWORKS, INC.)

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**NC DENR-DWM PERMIT # SR-RRO-004****Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐ Av Gas ☐ Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐ Kerosene ☐ Diesel ☒  
Varsol ☐ Naptha ☐ #2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐ #5 Fuel Oil ☐ #6 Fuel Oil ☐Motor Oil ☐ Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐ Used Oil ☐Manifest # **6****Contractor:**Geologix  
5316 Deep Valley Run  
Raleigh, NC 27606

Telephone: (919) 859-4544

**Generator:**City of Raleigh  
500 S. Blount Street  
Raleigh, NC 27601**Transporter:**Brinley's Trucking, Inc.  
3611 Cessna Drive  
Garner, NC 27529

Gross Weight: 55860

**Truck #:**

MC4

Tare Weight: 24500

Net Weight: 31360

**Date & Time Weighed:**

07/29/03

Equivalent Tons: 15.5

(See Attached Weight Ticket)

**Inspected & Accepted by:****Date Received:***Lana Buchanan* (For SOILWORKS, INC.)  
7/29/03

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**NCDENR-DWM PERMIT # SR-RRO-004****Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐ Av Gas ☐ Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐ Kerosene ☐ Diesel ☒Varsol ☐ Naptha ☐ #2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐ #5 Fuel Oil ☐ #6 Fuel Oil ☐Motor Oil ☐ Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐ Used Oil ☐

Manifest # 7

Telephone: (919) 859-4544

**Contractor:**

Geologix

5316 Deep Valley Run

Raleigh, NC 27606

**Generator:**

City of Raleigh

500 S. Blount Street

Raleigh, NC 27601

**Transporter:**

Brinley's Trucking, Inc.

3611 Cessna Drive

Garner, NC 27529

Gross Weight: 54640

**Truck #:**

MC4

Tare Weight: 24500

Net Weight: 30140

**Date & Time Weighed:**

07/29/03

Equivalent Tons: 15.1

(See Attached Weight Ticket)

**Inspected & Accepted by:**Janna Buchanan

(For SOILWORKS, INC.)

**Date Received:**7/29/03

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**NCDENR-DWM PERMIT # SR-RRO-004****Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐ Av Gas ☐ Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐ Kerosene ☐ Diesel ☒  
Varsol ☐ Naptha ☐ #2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐ #5 Fuel Oil ☐ #6 Fuel Oil ☐  
Motor Oil ☐ Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐ Used Oil ☐

Manifest #

Telephone: (919) 859-4544

**Contractor:**Geologix  
5316 Deep Valley Run  
Raleigh, NC 27606**Generator:**City of Raleigh  
500 S. Blount Street  
Raleigh, NC 27601**Transporter:**Brinley's Trucking, Inc.  
3611 Cessna Drive  
Garner, NC 27529

Gross Weight: 55360

**Truck #:**

WDI1

Tare Weight: 23220

Net Weight: 32140

**Date & Time Weighed:**

07/29/03

Equivalent Tons: 16.1

(See Attached Weight Ticket)

**Inspected & Accepted by:****Date Received:**Diana Buchanan (For SOILWORKS, INC.)  
7/29/03

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐ Av Gas ☐ Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐ Kerosene ☐ Diesel ☒  
Varsol ☐ Naptha ☐ #2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐ #5 Fuel Oil ☐ #6 Fuel Oil ☐  
Motor Oil ☐ Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐ Used Oil ☐**NCDENR-DWM PERMIT # SR-RRO-004**

Manifest #

9

Telephone: (919) 859-4544

**Contractor:**Geologix  
5316 Deep Valley Run  
Raleigh, NC 27606**Generator:**City of Raleigh  
500 S. Blount Street  
Raleigh, NC 27601**Transporter:**Brinley's Trucking, Inc.  
3611 Cessna Drive  
Garner, NC 27529**Gross Weight: 55680****Truck #:**

WDI1

**Tare Weight: 23220****Net Weight: 32460****Date & Time Weighed:**

07/29/03

**Equivalent Tons: 16.2****(See Attached Weight Ticket)****Inspected & Accepted by:**Laura Buchanan**(For SOILWORKS, INC.)****Date Received:**7/29/03

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**NCDENR-DWM PERMIT # SR-RRO-004****Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐ Av Gas ☐ Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐ Kerosene ☐ Diesel ☒Varsol ☐ Naptha ☐ #2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐ #5 Fuel Oil ☐ #6 Fuel Oil ☐Motor Oil ☐ Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐ Used Oil ☐

Manifest # 10

**Contractor:**

Geologix

Telephone: (919) 859-4544

5316 Deep Valley Run

Raleigh, NC 27606

**Generator:**

City of Raleigh

500 S. Blount Street

Raleigh, NC 27601

**Transporter:**

Brinley's Trucking, Inc.

3611 Cessna Drive

Garner, NC 27529

Gross Weight: 60460

**Truck #:**

WD11

Tare Weight: 23220

Net Weight: 37240

**Date & Time Weighed:**

07/29/03

Equivalent Tons: 18.6

(See Attached Weight Ticket)

**Inspected & Accepted by:****Date Received:**Laura Buchanan  
7/29/03

(For SOILWORKS, INC.)



**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐ Av Gas ☐ Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐ Kerosene ☐ Diesel ☒  
Varsol ☐ Naptha ☐ #2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐ #5 Fuel Oil ☐ #6 Fuel Oil ☐  
Motor Oil ☐ Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐ Used Oil ☐

Manifest # 11

**Contractor:**

Geologix

Telephone: (919) 859-4544

5316 Deep Valley Run

Raleigh, NC 27606

**Generator:**

City of Raleigh

500 S. Blount Street

Raleigh, NC 27601

**Transporter:**

Brinley's Trucking, Inc.

3611 Cessna Drive

Garner, NC 27529

Gross Weight: 53520

**Truck #:**

WD11

Tare Weight: 23220

Net Weight: 30300

**Date & Time Weighed:**

07/29/03

Equivalent Tons: 15.2

(See Attached Weight Ticket)

**Inspected & Accepted by:**Laura Buchanan

(For SOILWORKS, INC.)

**Date Received:**7/29/03

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐ Air Gas ☐ Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐ Kerosene ☐ Diesel ☒Varsol ☐ Naptha ☐ #2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐ #5 Fuel Oil ☐ #6 Fuel Oil ☐Motor Oil ☐ Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐ Used Oil ☐

Manifest # 12

Telephone: (919) 859-4544

**Contractor:**

Geologix

5316 Deep Valley Run

Raleigh, NC 27606

**Generator:**

City of Raleigh

500 S. Blount Street

Raleigh, NC 27601

**Transporter:**

Brinley's Trucking, Inc.

3611 Cessna Drive

Garner, NC 27529

Gross Weight: 56320

Tare Weight: 23220

Net Weight: 33100

**Truck #:**

WD11

**Date & Time Weighed:**

07/29/03

Equivalent Tons: 16.5

(See Attached Weight Ticket)

**Inspected & Accepted by:**

(For SOILWORKS, INC.)

**Date Received:**Laura Buchanan  
7/29/03

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

NCDENR-DWM PERMIT # SR-RRO-004

**Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐ Av Gas ☐ Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐ Kerosene ☐ Diesel ☒  
Varsol ☐ Naptha ☐ #2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐ #5 Fuel Oil ☐ #6 Fuel Oil ☐  
Motor Oil ☐ Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐ Used Oil ☐

Manifest #

13

**Contractor:**

Geologix

Telephone:

(919) 859-4544

5316 Deep Valley Run

Raleigh, NC 27606

**Generator:**

City of Raleigh

500 S. Blount Street

Raleigh, NC 27601

**Transporter:**

Brinley's Trucking, Inc.

3611 Cessna Drive

Garner, NC 27529

Gross Weight: 54700

**Truck #:**

WDI1

Tare Weight: 23220

Net Weight: 31480

**Date & Time Weighed:**

07/29/03

Equivalent Tons: 15.5

(See Attached Weight Ticket)

**Inspected & Accepted by:****Date Received:**Amanda Buchanan  
7/29/03

(For SOILWORKS, INC.)

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**NCDENR-DWM PERMIT # SR-RRO-004****Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐ Av Gas ☐ Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐ Kerosene ☐ Diesel ☒  
Varsol ☐ Naptha ☐ #2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐ #5 Fuel Oil ☐ #6 Fuel Oil ☐  
Motor Oil ☐ Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐ Used Oil ☐

Manifest #

14

Telephone:

(919) 859-4544

**Contractor:**

Geologix

5316 Deep Valley Run

Raleigh, NC 27606

**Generator:**

City of Raleigh

500 S. Blount Street

Raleigh, NC 27601

**Transporter:**

Brinley's Trucking, Inc.

3611 Cessna Drive

Garner, NC 27529

**Gross Weight: 54800****Truck #:**

WDI1

**Tare Weight: 23220****Net Weight: 31580****Date & Time Weighed:**

07/30/03

**Equivalent Tons: 15.8**

(See Attached Weight Ticket)

**Inspected & Accepted by:**Laura Buchanan

(For SOILWORKS, INC.)

**Date Received:**7/30/03

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

**NCDENR-DWM PERMIT # SR-RRO-004****Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐Av Gas ☐Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐Kerosene ☐Diesel ☒Varsol ☐Naptha ☐#2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐#5 Fuel Oil ☐#6 Fuel Oil ☐Motor Oil ☐Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐Used Oil ☐**Manifest #**

15

**Telephone:**

(919) 859-4544

**Contractor:**

Geologix

5316 Deep Valley Run

Raleigh, NC 27606

**Generator:**

City of Raleigh

500 S. Blount Street

Raleigh, NC 27601

**Transporter:**

Brinley's Trucking, Inc.

3611 Cessna Drive

Garner, NC 27529

**Gross Weight: 57260****Truck #:**

WDI1

**Tare Weight: 23220****Net Weight: 34040****Date & Time Weighed:**

07/30/03

**Equivalent Tons: 17.0****(See Attached Weight Ticket)****Inspected & Accepted by:****Date Received:**Laura Buchanan  
7/30/03

(For SOILWORKS, INC.)

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

NCDENR-DWM PERMIT # SR-RRO-004

**Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐ Av Gas ☐ Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐ Kerosene ☐ Diesel ☒Varsol ☐ Naptha ☐ #2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐ #5 Fuel Oil ☐ #6 Fuel Oil ☐Motor Oil ☐ Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐ Used Oil ☐

Manifest # 16

Telephone: (919) 859-4544

**Contractor:**

Geologix

5316 Deep Valley Run

Raleigh, NC 27606

**Generator:**

City of Raleigh

500 S. Blount Street

Raleigh, NC 27601

**Transporter:**

Brinley's Trucking, Inc.

3611 Cessna Drive

Garner, NC 27529

Gross Weight: 54480

**Truck #:**

WD11

Tare Weight: 23220

Net Weight: 31260

**Date & Time Weighed:**

07/30/03

Equivalent Tons: 15.6

(See Attached Weight Ticket)

**Inspected & Accepted by:****Date Received:**Aura Buchanan (For SOILWORKS, INC.)  
7/30/03

**NON-HAZARDOUS WASTE MANIFEST  
PETROLEUM CONTAMINATED SOIL****Soilworks, Inc.**

12861 NC Highway 96 North

Zebulon, NC 27597

Phone: (919) 366-1500 Fax: (919) 365-6180

NCDENR-DWM PERMIT # SR-RRO-004

**Contaminant Class & Type****DOT Class I (Petroleum)**Gasoline ☐ Air Gas ☐ Gasohol ☐**DOT Class II (Petroleum)**Jet Fuel ☐ Kerosene ☐ Diesel ☒  
Varsol ☐ Naptha ☐ #2 Fuel Oil ☐**DOT Class III (Petroleum)**# 4 Fuel Oil ☐ #5 Fuel Oil ☐ #6 Fuel Oil ☐  
Motor Oil ☐ Hydraulic Oil ☐**Other (Petroleum Based)**Waste Oil ☐ Used Oil ☐

Manifest #

17

Telephone:

(919) 859-4544

Contractor:

Geologix

5316 Deep Valley Run

Raleigh, NC 27606

Generator:

City of Raleigh

500 S. Blount Street

Raleigh, NC 27601

Transporter:

Brinley's Trucking, Inc.

3611 Cessna Drive

Garner, NC 27529

Gross Weight: 53760

Truck #:

KT1

Tare Weight: 23500

Net Weight: 30260

Date &amp; Time Weighed:

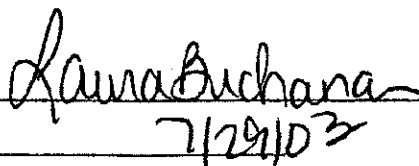
07/29/03

Equivalent Tons: 15.1

(See Attached Weight Ticket)

Inspected &amp; Accepted by:

Date Received:

  
7/29/03

(For SOILWORKS, INC.)



Phone # : 919-774-4517

Earthtec Environmental, Inc.  
Post Office Box 130  
Sanford, North Carolina 27331

Fax # : 919-774-6415

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: <i>Geologix</i>	Contact:
	Phone:
Generator: <i>City of Raleigh</i>	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, BearCreek, NC 27207	Contact: Scott Keller Phone: 919-774-4517 or 919/770-4258
Waste Description:	Waste Origination:
Truck #: <i>MG-1</i>	Gross Weight: <i>64400</i>
	Tare Weight: <i>18500</i>
	Net Weight: <i>45900</i>

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

*Quintanilla* 7/29/03  
Generator Agent Signature Title Date

Acknowledgment of Receipt of Material: *James Reaves*  
Driver's Signature Date

Noted Discrepancies: \_\_\_\_\_  
Inspected & Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By: *Clyde* Date: *7-29-03*

Phone #: 919-774-4517

Earthtec Environmental, Inc.

Fax #: 919-774-6415

Post Office Box 130

Sanford, North Carolina 27331

## NON-HAZARDOUS WASTE MANIFEST

Project Number:	Load Number:
Consultant: <i>Geologix</i>	Contact:
	Phone:
Generator: <i>City of Rd.</i>	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, Bear Creek, NC 27207	Contact: Scott Keller Phone: 919-774-4517 or 919-770-4258
Waste Description:	Waste Origination:
Truck #: <i>WW-02</i>	Gross Weight: <i>63320</i>
	Tare Weight: <i>18400</i>
	Net Weight: <i>44920</i>

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

Generator / Agent Signature

Title

Date

Acknowledgment of Receipt of Material:

Driver's Signature

Date

Noted Discrepancies:

Inspected &amp; Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By:

Date: *7-29-03*

22.46

Phone # : 614-444-7645

Earthtec Environmental of Ohio, Inc.  
1900 Alum Creek Drive  
Columbus, Ohio 43207

Fax # : 614-444-1797

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: <i>Geologic</i>	Contact:
	Phone:
Generator: <i>City of Ral.</i>	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Rd. Bear Creek, N.C. 27207	Contact: Scott Keller / Gina Bycura Phone: 919-774-4517
Waste Description: Petroleum Cont. Soil	Waste Origination:
Truck #: <i>MS-02</i>	Gross Weight: <i>77260</i>
	Tare Weight: <i>23400</i>
	Net Weight: <i>53860</i> 53860

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE. 26.93

*Quint Clark agent* 7/29/03  
\_\_\_\_\_  
Generator / Agent Signature Title Date

Acknowledgment of Receipt of Material: *Big House* 7-29-03  
\_\_\_\_\_  
Driver's Signature Date

Noted Discrepancies: \_\_\_\_\_

Inspected & Accepted (except as noted above) By: Earthtec Environmental of, Inc.

Accepted By: *Clyde* Date: 7-29-03

Phone # : 919-774-4517

Earthtec Environmental, Inc.  
Post Office Box 130  
Sanford, North Carolina 27331

Fax # : 919-774-6415

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: <i>Geologix</i>	Contact:
	Phone:
Generator: <i>City of Cal.</i>	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, BearCreek, NC 27207	Contact: Scott Keller Phone: 919-774-4517 or 919/770-4258
Waste Description:	Waste Origination:
Truck # : <i>MM-2</i>	Gross Weight: <i>68860</i>
	Tare Weight: <i>23400</i>
	Net Weight: <i>45460</i>

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

Generator / Agent Signature

Title

Date

Acknowledgment of Receipt of Material:

Driver's Signature

Date

Noted Discrepancies:

Inspected & Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By:

Date:

22.73

Phone # : 919-774-4517

Earthtec Environmental, Inc.  
Post Office Box 130  
Sanford, North Carolina 27331

Fax # : 919-774-6415

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: <i>Geologic</i>	Contact:
	Phone:
Generator: <i>City of Ral.</i>	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, BearCreek, NC 27207	Contact: Scott Keller Phone: 919-774-4517 or 919/770-4258
Waste Description:	Waste Origination:
Truck #: <i>WMR-01</i>	Gross Weight: <i>64560</i>
	Tare Weight: <i>21400</i>
	Net Weight: <i>43160</i>

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

*David Brock* 7/29/03  
Generator / Agent Signature Title Date

Acknowledgment of Receipt of Material: *[Signature]* 7-29-03  
Driver's Signature Date

Noted Discrepancies:

Inspected & Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By: *[Signature]* Date: *7-29-03*

21.58

Phone #: 919-774-4517

Earthtec Environmental, Inc.  
Post Office Box 130  
Sanford, North Carolina 27331

Fax #: 919-774-6415

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: <i>Geologix</i>	Contact:
	Phone:
Generator: <i>City of Ras.</i>	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, BearCreek, NC 27207	Contact: Scott Keller Phone: 919-774-4517 or 919/770-4258
Waste Description:	Waste Origination:
Truck #: <i>WMR 01</i>	Gross Weight: <i>67760</i>
	Tare Weight: <i>21400</i>
	Net Weight: <i>46360</i>

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

*[Signature]* 7/29/03  
Generator / Agent Signature Title Date

*[Signature]* 7-29-03  
Acknowledgment of Receipt of Material Driver's Signature Date

Noted Discrepancies: \_\_\_\_\_  
Inspected & Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By: *[Signature]* Date: *7 29 03*

23.18

Phone # : 919-774-4517

Earthtec Environmental, Inc.  
Post Office Box 130  
Sanford, North Carolina 27331

Fax # : 919-774-6415

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: <i>Geologic</i>	Contact:
	Phone:
Generator: <i>City of Rd.</i>	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, BearCreek, NC 27207	Contact: Scott Keller Phone: 919-774-4517 or 919/770-4258
Waste Description:	Waste Origination:
Truck #: <i>B-7</i>	Gross Weight: <i>66800</i>
	Tare Weight: <i>18300</i>
	Net Weight: <i>48500</i>

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

*Quint Cross* 7/29/03  
Generator Agent Signature Title Date

Acknowledgment of Receipt of Material: *James L. Smith* 7-29-03  
Driver's Signature Date

Noted Discrepancies: \_\_\_\_\_  
Inspected & Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By: *Clyde D.* Date: *7 29 03*

24.25



Phone #: 919-774-4517

Earthtec Environmental, Inc.  
Post Office Box 130  
Sanford, North Carolina 27331

Fax #: 919-774-6415

### NON-HAZARDOUS WASTE MANIFEST

Project Number:	Load Number:
Consultant: <i>Geologix</i>	Contact:
	Phone:
Generator: <i>City of Kel.</i>	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, BearCreek, NC 27207	Contact: Scott Keller Phone: 919-774-4517 or 919/770-4258
Waste Description:	Waste Origination:
Truck #: <i>G-7</i>	Gross Weight: <i>676026</i>
	Tare Weight: <i>18300</i>
	Net Weight: <i>67720</i>

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

*[Signature]* *agent* *7/29/03*  
Generator / Agent Signature Title Date

Acknowledgment of Receipt of Material: *[Signature]*  
Driver's Signature Date

Noted Discrepancies: \_\_\_\_\_  
Inspected & Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By: *[Signature]* Date: *7 29 03*

Phone # : 614-444-7645

Earthtec Environmental of Ohio, Inc.

Fax # : 614-444-1797

1900 Alum Creek Drive

Columbus, Ohio 43207

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: <i>Geologic Inc</i>	Contact:
	Phone:
Generator: <i>City of Raleigh</i>	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Rd. Bear Creek, N.C. 27207	Contact: Scott Keller / Gina Bycura Phone: 919-774-4517
Waste Description: Petroleum Cont. Soil	Waste Origination:
Truck #: <i>RW 465</i>	Gross Weight: <i>77940</i>
	Tare Weight: <i>24500</i>
	Net Weight: <i>53440</i>

26.72

**GENERATOR'S CERTIFICATION:** I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

Generator / Agent Signature

Title

Date

Acknowledgment of Receipt of Material:

Driver's Signature

Date

Noted Discrepancies:

Inspected & Accepted (except as noted above) By: Earthtec Environmental of, Inc.

Accepted By:

Date:

*7-30-03*

Phone # : 614-444-7645

Earthtec Environmental of Ohio, Inc.

Fax # : 614-444-1797

1900 Alum Creek Drive

Columbus, Ohio 43207

## NON-HAZARDOUS WASTE MANIFEST

Project Number:	Load Number:
Consultant: Geologix, Inc.	Contact:
	Phone:
Generator: City of Raleigh	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Rd. Bear Creek, N.C. 27207	Contact: Scott Keller / Gina Bycura Phone: 919-774-4517
Waste Description: Petroleum Cont. Soil	Waste Origination: 10/24/03 to 11/10/03
Truck #: B-100	Gross Weight: 56930
	Tare Weight: 21500
	Net Weight: 35430

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

Generator / Agent Signature

Title

Date

Acknowledgment of Receipt of Material:

Driver's Signature

Date

Noted Discrepancies:

Inspected &amp; Accepted (except as noted above) By: Earthtec Environmental of, Inc.

Accepted By:

Date: 7-30-03

Phone #: 614-444-7645

Earthtec Environmental of Ohio, Inc.

Fax #: 614-444-1797

1900 Alum Creek Drive

Columbus, Ohio 43207

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: Geologix Inc.	Contact:
	Phone:
Generator: City of Raleigh	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc 3145 Rosser Rd. Bear Creek, N.C. 27207	Contact: Scott Keller / Gina Bycura Phone: 919-774-4517
Waste Description: Petroleum Cont. Soil	Waste Origination: to ntj
Truck #: WG3	Gross Weight: 68280
	Tare Weight: 22,500
	Net Weight: 45780 22.89

**GENERATOR'S CERTIFICATION:** I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

Generator / Agent Signature

Title

Date

Acknowledgment of Receipt of Material:

Driver's Signature

Date

Noted Discrepancies:

Inspected &amp; Accepted (except as noted above) By: Earthtec Environmental of, Inc.

Accepted By:

Date: 7-30-03

Phone # : 614-444-7645

Earthtec Environmental of Ohio, Inc.

Fax # : 614-444-1797

1900 Alum Creek Drive

Columbus, Ohio 43207

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: Geologic, Inc.	Contact:
	Phone:
Generator: City of Raleigh	Contact:
	Phone:
Transporter:	Contact:
	Phone: 212-01037
Destination: Earthtec Environmental, Inc. 3145 Rosser Rd. Bear Creek, N.C. 27207	Contact: Scott Keller / Gina Bycura Phone: 919-774-4517
Waste Description: Petroleum Cont. Soil	Waste Origination: 101
Truck #: A-1	Gross Weight: 57,300
	Tare Weight: 20,000
	Net Weight: 37,300 18.65

**GENERATOR'S CERTIFICATION:** I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

Generator / Agent Signature

Title

Date

Acknowledgment of Receipt of Material:

Driver's Signature

Date

Noted Discrepancies:

Inspected & Accepted (except as noted above) By: Earthtec Environmental of, Inc.

Accepted By:

Date:

7-30-03

Phone #: 614-444-7645

Earthtec Environmental of Ohio, Inc.

Fax #: 614-444-1797

1900 Alum Creek Drive

Columbus, Ohio 43207

## NON-HAZARDOUS WASTE MANIFEST

Project Number:	Load Number:
Consultant: Geologix, Inc.	Contact:
	Phone:
Generator: City of Raleigh	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Rd. Bear Creek, N.C. 27207	Contact: Scott Keller / Gina Bycura Phone: 919-774-4517
Waste Description: Petroleum Cont. Soil	Waste Origination:
Truck #: LXL 2	Gross Weight: 63060
	Tare Weight: 20100
	Net Weight: 42960 21.48

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

Generator / Agent Signature

Title

Date

Acknowledgment of Receipt of Material:

Driver's Signature

Date

Noted Discrepancies:

Inspected &amp; Accepted (except as noted above) By: Earthtec Environmental of, Inc.

Accepted By:

Date:

7-30-03

Phone # : 614-444-7645

Earthtec Environmental of Ohio, Inc.  
1900 Alum Creek Drive  
Columbus, Ohio 43207

Fax # : 614-444-1797

### NON-HAZARDOUS WASTE MANIFEST

Project Number:	Load Number:
Consultant: Geologix Inc.	Contact:
	Phone:
Generator: City of Raleigh	Contact:
	Phone:
Transporter:	Contact:
	Phone: GM-2
Destination: Earthtec Environmental, Inc. 3145 Rosser Rd. Bear Creek, N.C. 27207	Contact: Scott Keller / Gina Bycura Phone: 919-774-4517
Waste Description: Petroleum Cont. Soil	Waste Origination: GE (Geologix)
Truck #: GM-2	Gross Weight: 76 800
	Tare Weight: 24 500
	Net Weight: 52 300

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

Generator / Agent Signature

Title

Date

Acknowledgment of Receipt of Material

Driver's Signature

Date

Noted Discrepancies:

Inspected & Accepted (except as noted above) By: Earthtec Environmental of, Inc.

Accepted By:

Date:

26.15

Phone # : 614-444-7645

Earthtec Environmental of Ohio, Inc.

Fax # : 614-444-1797

1900 Alum Creek Drive

Columbus, Ohio 43207

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: <i>Geologic, Inc.</i>	Contact:
	Phone:
Generator: <i>City of Raleigh</i> <i>WG</i>	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc 3145 Rosser Rd. Bear Creek, N.C. 27207	Contact: Scott Keller / Gina Bycum Phone: 919-774-4517
Waste Description: Petroleum Cont. Soil	Waste Origination:
Truck #: <i>WG 7</i>	Gross Weight: <i>71200</i>
	Tare Weight: <i>21500</i>
	Net Weight: <i>49700</i>

2485

**GENERATOR'S CERTIFICATION:** I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

Generator / Agent Signature

Title

Date

Acknowledgment of Receipt of Material:

*John Deaver*  
Driver's Signature

Date

Noted Discrepancies:

Inspected & Accepted (except as noted above) By: Earthtec Environmental of, Inc.

Accepted By:

*Clyde*

Date: *7-30-03*



Phone # : 919-774-4517

Earthtec Environmental, Inc.

Fax # : 919-774-6415


Post Office Box 130

Sanford, North Carolina 27331

### NON-HAZARDOUS WASTE MANIFEST

Project Number	Load Number:
Consultant: Geologic	Contact:
	Phone:
Generator: City of Raleigh	Contact:
	Phone:
Transporter: Hankins	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, BearCreek, NC 27207	Contact: Scott Keller Phone: 919-774-4517 or 919/770-4258
Waste Description:	Waste Origination:
Truck #: W/H-12	Gross Weight: 78040
	Tare Weight: 23600
	Net Weight: 54440

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.


7/31/03  
 Generator / Agent Signature Title Date

Acknowledgment of Receipt of Material:   
 Driver's Signature Date

Noted Discrepancies: \_\_\_\_\_  
 Inspected & Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By:  Date: \_\_\_\_\_

27.22

41-1-10  
5B-3  
Phone #: 919-774-4517

Earthtec Environmental, Inc.  
Post Office Box 130  
Sanford, North Carolina 27331

Fax #: 919-774-6415

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: Geologix	Contact:
	Phone:
Generator: City of Raleigh	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, BearCreek, NC 27207	Contact: Scott Keller Phone: 919-774-4517 or 919/770-4258
Waste Description:	Waste Origination:
Truck #: 5B-3	Gross Weight: 75200
	Tare Weight: 24500
	Net Weight: 50700

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

Generator / Agent Signature

Title

7/30/03  
Date

Acknowledgment of Receipt of Material:

Driver's Signature

Date

Noted Discrepancies:

Inspected & Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By:

Date:

25-35

Phone #: 919-774-4517

Earthtec Environmental, Inc.

Fax #: 919-774-6415

Post Office Box 130

Sanford, North Carolina 27331

**NON-HAZARDOUS WASTE MANIFEST**

Project Number: <i>5/31/03</i>	Load Number:
Consultant: <i>Geologix, Inc.</i>	Contact: <i>Rob Liverman</i>
	Phone: <i>919-859-4544</i>
Generator: <i>City of Raleigh</i>	Contact: <i>Greg Pittman</i>
	Phone: <i>919-890-3087</i>
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, BearCreek, NC 27207	Contact: <i>Scott Keller</i>
	Phone: <i>919-774-4517 or 919/770-4258</i>
Waste Description: <i>Gasoline Contaminated Soil</i>	Waste Origination: <i>500 S. Blount St. Raleigh, NC</i>
Truck #: <i>3B-3</i>	Gross Weight: <i>65860</i>
	Tare Weight: <i>24500</i>
	Net Weight: <i>41360</i>

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

*Robert B. Liverman, Jr.* President - Geologix *7/30/03*  
 Generator / Agent Signature Title Date

Acknowledgment of Receipt of Material: *[Signature]* *7/30/03*  
 Driver's Signature Date

Noted Discrepancies: \_\_\_\_\_

Inspected &amp; Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By: *[Signature]* Date: \_\_\_\_\_

20.68

Phone #: 919-774-4517

Earthtec Environmental, Inc.  
Post Office Box 130  
Sanford, North Carolina 27331

Fax #: 919-774-6415

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: <i>Geologix, Inc.</i>	Contact: <i>Rob Liverman</i>
	Phone: <i>919-859-4544</i>
Generator: <i>City of Raleigh</i>	Contact: <i>Greg Pittman</i>
	Phone: <i>919-800-3087</i>
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, BearCreek, NC 27207	Contact: Scott Keller Phone: 919-774-4517 or 919/770-4258
Waste Description: <i>Gas contaminated soil</i>	Waste Origination: <i>500 S. Blount St. Raleigh, NC</i>
Truck #: <i>WH-13</i>	Gross Weight: <i><del>49840</del> 72140</i>
	Tare Weight: <i>23100</i>
	Net Weight: <i>49040</i>

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

*Robert H. Lunn* President - Geologix *7/30/03*  
Generator / Agent Signature Title Date

Acknowledgment of Receipt of Material: *Annex Harker*  
Driver's Signature Date

Noted Discrepancies: \_\_\_\_\_  
Inspected & Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By: *Clyde* Date: *7-29-03*

24.52

Phone #: 919-774-4517

Earthtec Environmental, Inc.

Fax #: 919-774-6415

Post Office Box 130

Sanford, North Carolina 27331

## NON-HAZARDOUS WASTE MANIFEST

Project Number:	Load Number:
Consultant: <i>Geologix, Inc.</i>	Contact: <i>Rob Liverman</i>
	Phone: <i>919-859-4544</i>
Generator: <i>City of Raleigh</i>	Contact: <i>Greg Pittman</i>
	Phone: <i>919-890-3087</i>
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, BearCreek, NC 27207	Contact: Scott Keller ✓ Phone: 919-774-4517 or 919/770-4258
Waste Description: <i>Petroleum cont. soil</i>	Waste Origination: <i>500 S. Blount St. Raleigh, NC</i>
Truck #: <i>WH-12</i>	Gross Weight: <i>77640</i>
	Tare Weight: <i>23600</i>
	Net Weight: <i>54040</i>

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

*Robert H. Liverman, Jr.* President - Geologix *7/30/03*  
 Generator / Agent Signature Title Date

Acknowledgment of Receipt of Material: *W. J. [Signature]* *7/29/03*  
 Driver's Signature Date

Noted Discrepancies: \_\_\_\_\_  
 Inspected & Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By: *C. [Signature]* Date: *7-29-03*

27.02

Phone #: 919-774-4517

Earthtec Environmental, Inc.

Fax #: 919-774-6415

Post Office Box 130

Sanford, North Carolina 27331

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: <i>Geologix</i>	Contact: <i>Rob Liverman</i>
	Phone: <i>919-859-4544</i>
Generator: <i>City of Raleigh</i>	Contact: <i>Greg Pittman</i>
	Phone: <i>919-890-3087</i>
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, BearCreek, NC 27207	Contact: Scott Keller ✓ Phone: 919-774-4517 or 919/770-4258
Waste Description: <i>Gas contaminated soil</i>	Waste Origination: <i>500 S. Blount St. Raleigh, NC</i>
Truck #: <i>WH-13</i>	Gross Weight: <i>73980</i>
	Tare Weight: <i>23100</i> ✓
	Net Weight: <i>50880</i>

**GENERATOR'S CERTIFICATION:** I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

*Robert H. Liverman, Jr.* President - Geologix *7/30/03*  
 Generator / Agent Signature Title Date

Acknowledgment of Receipt of Material: *James H. Harkins*  
 Driver's Signature Date

Noted Discrepancies: \_\_\_\_\_

Inspected & Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By: *Clyde Davis* Date: *7 29 03*

25-19



Phone #: 919-774-4517

Earthtec Environmental, Inc  
Post Office Box 130  
Sanford, North Carolina 27331

Fax #: 919-774-6415

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: <i>Geologic, Inc.</i>	Contact: <i>Rob Liverman</i>
	Phone: <i>919-859-4544</i>
Generator: <i>City of Raleigh</i>	Contact: <i>Greg Pittman</i>
	Phone: <i>919-890-3087</i>
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, Bear Creek, NC 27207	Contact: Scott Keller Phone: 919-774-4517 or 919/770-4258
Waste Description: <i>Gas contaminated soil</i>	Waste Origination: <i>500 S. Blount St Raleigh, NC</i>
Truck #: <i>WH-12</i>	Gross Weight: <i>74720</i>
	Tare Weight: <i>23600</i>
	Net Weight: <i>51120</i>

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

*Robert H. Liverman, Jr.* President *Geologic* *7/30/03*  
Generator / Agent Signature Title Date

Acknowledgment of Receipt of Material: *[Signature]* *7/29/03*  
Driver's Signature Date

Noted Discrepancies: \_\_\_\_\_

Inspected & Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By: *[Signature]* Date: *7-29-03*

*25.56*

Phone #: 919-774-4517

Earthtec Environmental, Inc.

Fax #: 919-774-6415

Post Office Box 130  
Sanford, North Carolina 27331

**NON-HAZARDOUS WASTE MANIFEST**

Project Number:	Load Number:
Consultant: <i>Geologix, Inc.</i>	Contact:
	Phone:
Generator: <i>City of Raleigh</i>	Contact:
	Phone:
Transporter:	Contact:
	Phone:
Destination: Earthtec Environmental, Inc. 3145 Rosser Road, BearCreek, NC 27207	Contact: Scott Keller Phone: 919-774-4517 or 919/770-4258
Waste Description:	Waste Origination:
Truck #: <del>WH13</del> <i>WH13</i>	Gross Weight: <i>179240</i>
	Tare Weight: <i>23100</i>
	Net Weight: <i>56140</i>

GENERATOR'S CERTIFICATION: I certify that the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of HAZARDOUS WASTE.

*[Signature]* *Agent* *7/30/03*  
Generator/ Agent Signature Title Date

*[Signature]* *7-30-03*  
Acknowledgment of Receipt of Material: Driver's Signature Date

Noted Discrepancies: \_\_\_\_\_  
Inspected & Accepted (except as noted above) By: Earthtec Environmental, Inc.

Accepted By: *[Signature]* Date: \_\_\_\_\_

*28.07*

## **APPENDIX F**

### **Chain-of-Custody Records**



***Chain-of-Custody Records***

***UST Closure Samples***

GeoChem, Incorporated

Keb Livermore  
411 Creechview, Truss  
5316 Deep Valley Run  
Raleigh, NC 27606

**2500 Gate Way Centre Blvd., Suite 300**  
**Morrisville, NC 27560**  
**Phone: (919) 460-8093 • Fax: (919) 460-0167**

**Morrisville, NC 27560**

**Phone: (919) 460-8093 • Fax: (919) 460-0167**

# Chain of Custody Record

PROJECT SITE NUMBER		PO#	ANALYSES		GEOCHEM PROJECT #	
SITE NAME			DATE DUE			
COLLECTED BY (Signature)			VERBAL/FAX/HARDCOPY			
TURNAROUND IN DAYS		SAMPLE MATRIX	DATE AND TIME COLLECTED		LAB ID NO. (for lab use only)	
FIELD SAMPLE ID						
Disperser-St	5	Soil	7/28/03	1135	✓	9418
Disperser-WW				1130	✓	9444
Gas VST Stackpk				1230	✓	950
Gas VST Pipeline				1200	✓	951
North VST-E				1540	✓	952
North VST-W				1530	✓	953
South VST-E				1610	✓	954
South VST-W				1620	✓	955
Underoil-W				1410	✓	956
Underoil-E				1400	✓	957
Underoil-Stackpk				1335	✓	958
Compressor VST				1330	✓	959

RELINQUISHED BY: Robert H. Lawrence, Jr.

DATE: 8/01/03

TIME: 1600

WHAT AGENCY? DENR

RECEIVED BY: Kathleen Conrad

DATE: 8/13/03

TIME: 1600

RELINQUISHED BY:

DATE:

TIME:

**This Chain of Custody is considered a written contract to perform the services requested in the analyses section of this document.**

***Chain-of-Custody Records***

***Post-Excavation Samples***



GeoChem, Incorporated

**2500 Gate Way Centre Blvd., Suite 300**

**Morrisville, NC 27560**

**Phone: (919) 460-8093 • Fax: (919) 460-0167**

# Chain of Custody Record

[illegible]

**This Chain of Custody is considered a written contract to perform the services requested in the analyses section of this document.**

## **APPENDIX G**

### **Laboratory Analytical Records/Data**

***UST Closure Lab Samples***



# GeoChem, Incorporated

## Environmental Laboratories

### Certified Analytical Laboratory

NC # 37745 , NC # 336, NC # 461, EPA ID # 155

**Client Project Manager**

Robert Livermon

**Site Name:**

City of Raleigh 500 S. Blount St.

GeoLogix

5316 Deep Valley Run

Raleigh NC 27606

**Report Date**

Monday, August 11, 2003

**PO #****Date Received in lab:**

Saturday, August 02, 2003

**GCI Project #: 0308-001**

### Summary of requested analytical work

Sample type code #s :	1 = solid samples;	2 = liquid samples;	3 = Air samples;	4 = sludges/unknowns
Field Number: Dispenser-SE	Lab ID 948	Sample Type: 1	Date Analyzed: 8/7/03	for 5030 soil
Date Sampled 7/28/03			Proper Preservation	Yes
Field Number: Dispenser-NW	Lab ID 949	Sample Type: 1	Date Analyzed: 8/7/03	for 5030 soil
Date Sampled 7/28/03			Proper Preservation	Yes
Field Number: Gas UST Stockpile	Lab ID 950	Sample Type: 1	Date Analyzed: 8/7/03	for 5030 soil
Date Sampled 7/28/03			Proper Preservation	Yes
Field Number: Gas UST Pipeline	Lab ID 951	Sample Type: 1	Date Analyzed: 8/7/03	for 5030 soil
Date Sampled 7/28/03			Proper Preservation	Yes
Field Number: North UST-E	Lab ID 952	Sample Type: 1	Date Analyzed: 8/7/03	for 5030 soil
Date Sampled 7/28/03			Proper Preservation	Yes
Field Number: North UST-W	Lab ID 953	Sample Type: 1	Date Analyzed: 8/7/03	for 5030 soil
Date Sampled 7/28/03			Proper Preservation	Yes
Field Number: South UST-E	Lab ID 954	Sample Type: 1	Date Analyzed: 8/7/03	for 5030 soil
Date Sampled 7/28/03			Proper Preservation	Yes
Field Number: South UST-W	Lab ID 955	Sample Type: 1	Date Analyzed: 8/7/03	for 5030 soil
Date Sampled 7/28/03			Proper Preservation	Yes
Field Number: Used Oil-W	Lab ID 956	Sample Type: 1	Date Analyzed: 8/5/03	for 3550
Date Sampled 7/28/03			Proper Preservation	Yes

J

Here by certify that I have Reviewed and approve this data set

# GeoChem, Incorporated

## Environmental Laboratories

### Certified Analytical Laboratory

NC # 37745 , NC # 336, NC # 461, EPA ID # 155

**Client Project Manager**

Robert Livermon

**Site Name:**

City of Raleigh 500 S. Blount St.

GeoLogix

5316 Deep Valley Run

Raleigh

NC 27606

**Report Date**

Monday, August 11, 2003

**PO #****Date Received in lab:**

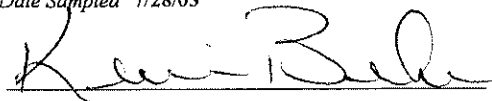
Saturday, August 02, 2003

**GCI Project #: 0308-001**

### Summary of requested analytical work

Sample type code #s :	1 = solid samples;	2 = liquid samples;	3 = Air samples;	4 = sludges/unknowns
Field Number: Used Oil-W Date Sampled 7/28/03	Lab ID 956	Sample Type: 1	Date Analyzed: 8/7/03 Proper Preservation	for 5030 soil Yes
Field Number: Used Oil-W Date Sampled 7/28/03	Lab ID 956	Sample Type: 1	Date Analyzed: 8/8/03 Proper Preservation	for Cr by FI Yes
Field Number: Used Oil-W Date Sampled 7/28/03	Lab ID 956	Sample Type: 1	Date Analyzed: 8/8/03 Proper Preservation	for Pb by FI Yes
Field Number: Used Oil-E Date Sampled 7/28/03	Lab ID 957	Sample Type: 1	Date Analyzed: 8/5/03 Proper Preservation	for 3550 Yes
Field Number: Used Oil-E Date Sampled 7/28/03	Lab ID 957	Sample Type: 1	Date Analyzed: 8/7/03 Proper Preservation	for 5030 soil Yes
Field Number: Used Oil-E Date Sampled 7/28/03	Lab ID 957	Sample Type: 1	Date Analyzed: 8/8/03 Proper Preservation	for Cr by FI Yes
Field Number: Used Oil-E Date Sampled 7/28/03	Lab ID 957	Sample Type: 1	Date Analyzed: 8/8/03 Proper Preservation	for Pb by FI Yes
Field Number: Used Oil-Stockpile Date Sampled 7/28/03	Lab ID 958	Sample Type: 1	Date Analyzed: 8/5/03 Proper Preservation	for 3550 Yes
Field Number: Used Oil-Stockpile Date Sampled 7/28/03	Lab ID 958	Sample Type: 1	Date Analyzed: 8/8/03 Proper Preservation	for 5030 soil Yes

J



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# GeoChem Incorporated Certified Analytical Laboratory

NC # 37745 , NC # 336, EPA ID # 155

Thursday, August 14, 2003

## Site Name:

City of Raleigh 500 S. Blount St.

GCI Project # 0308-001

Conc. in  
mg/kg

PQL in  
mg/kg

Field ID Used Oil-W

Lab ID 956

Date Analyzed: 8/8/2003

### Cr by FI

Chromium

BDL

24.968

### Pb by FI

Lead

BDL

25.215

Field ID Used Oil-E

Lab ID 957

Date Analyzed: 8/8/2003

### Cr by FI

Chromium

BDL

25.25

### Pb by FI

Lead

BDL

389.031

Field ID Used Oil-Stock

Lab ID 958

Date Analyzed: 8/8/2003

### Cr by FI

Chromium

BDL

24.393

### Pb by FI

Lead

164.4

24.393

# GeoChem Incorporated Certified Analytical Laboratory

NC # 37745 , NC # 336, EPA ID # 155

Thursday, August 14, 2003

GCI Project # 0308-001

Site Name: City of Raleigh 500 S. Blount St.      Conc. in mg/kg      PQL in mg/kg

Field ID Dispenser-SE	Lab ID 948 Date Analyzed: 8/7/2003      Dry Wt %: 0.8		
	Gasoline range	17	6.2
Field ID Dispenser-NW	Lab ID 949 Date Analyzed: 8/7/2003      Dry Wt %: 0.81		
	Gasoline range	BDL	6.2
Field ID Gas UST Stockpile	Lab ID 950 Date Analyzed: 8/7/2003      Dry Wt %: 0.83		
	Gasoline range	13	6.0
Field ID Gas UST Pipeline	Lab ID 951 Date Analyzed: 8/7/2003      Dry Wt %: 0.85		
	Gasoline range	17	5.9
Field ID North UST-E	Lab ID 952 Date Analyzed: 8/7/2003      Dry Wt %: 0.82		
	Gasoline range	534	6.1
Field ID North UST-W	Lab ID 953 Date Analyzed: 8/7/2003      Dry Wt %: 0.74		
	Gasoline range	99	6.7
Field ID South UST-E	Lab ID 954 Date Analyzed: 8/7/2003      Dry Wt %: 0.84		
	Gasoline range	557	5.9
Field ID South UST-W	Lab ID 955 Date Analyzed: 8/7/2003      Dry Wt %: 0.77		
	Gasoline range	738	6.5
Field ID Used Oil-W	Lab ID 956 Date Analyzed: 8/5/2003      Dry Wt %: 0.79		
	Diesel range	432	6.4
	Gasoline range	209	6.4
Field ID Used Oil-E	Lab ID 957 Date Analyzed: 8/5/2003      Dry Wt %: 0.78		
	Diesel range	225	6.4
	Gasoline range	143	6.4

# ***GeoChem Incorporated Certified Analytical Laboratory***

***NC # 37745 , NC # 336, EPA ID # 155***

***Monday, August 11, 2003***

***GCI Project # 0308-001***

***Site Name: City of Raleigh 500 S. Blount St.***

**Conc. in mg/kg**

**PQL in mg/kg**

**Field ID Used Oil-Stockpile**      *Lab ID 958*

*Date Analyzed: 8/5/03*

*Dry Wt %: 0.82*

**Diesel range            175**

**6.1**

**Gasoline range        88**

**6.1**

**Field ID Corner UST**

*Lab ID 959*

*Date Analyzed: 8/5/03*

*Dry Wt %: 0.76*

**Diesel range            1,210**

**6.6**

**Gasoline range        1,767**

**32.8**

# ***GeoChem Incorporated Quality Control Results***

***NC # 37745 , NC # 336, EPA ID # 155***

***Monday, August 11, 2003***

***GCI Project # 0308-001***

<b>Cr by FI</b>	<b>Percent Recovery</b>	<b>lowest detect @ ideal conditions</b>
		<b>MDL in mg/kg</b>
Chromium	100	0.5
Lead	98	0.015

# GeoChem Incorporated Quality Control Results

NC # 37745 , NC # 336, EPA ID # 155

Monday, August 11, 2003

CI Project # 0308-001

		Percent Recovery	Lab Blank	MDL in mg/kg
Date Analyzed: 8/7/03	Dry Wt %: 0.85			
	Gasoline range	88	0	1.88
		Percent Recovery	Lab Blank	MDL in mg/kg
Date Analyzed: 8/5/03	Dry Wt %: 0.78			
	Diesel range	79	0	2.5

*Post-Excavation Lab Samples*

# GeoChem, Incorporated

## Environmental Laboratories

### Certified Analytical Laboratory

NC # 37745 ,NC # 336, NC # 461, EPA ID # 155

**Client Project Manager**

Robert H. Livermon, Jr.

**Site Name:**

S. Blount St.

**Geologix**

5316 Deep Valley Run

Raleigh NC 27606

**Report Date**

Tuesday, August 26, 2003

**PO #****Date Received in lab:**

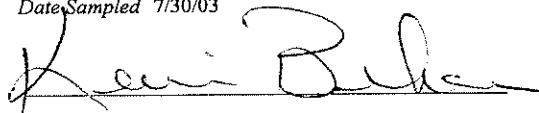
Monday, August 04, 2003

**GCI Project #: 0308-003**

### Summary of requested analytical work

Sample type code #s :	1 = solid samples;	2 = liquid samples;	3 = Air samples;	4 = sludges/unknowns
Field Number: West Wall-N Date Sampled 7/30/03	Lab ID 962	Sample Type: 1	Date Analyzed: 8/8/03 Proper Preservation	for 8260 soil Yes
Field Number: West Wall-N Date Sampled 7/30/03	Lab ID 962	Sample Type: 1	Date Analyzed: 8/5/03 Proper Preservation	for VPH soil Yes
Field Number: West Wall-S Date Sampled 7/30/03	Lab ID 963	Sample Type: 1	Date Analyzed: 8/8/03 Proper Preservation	for 8260 soil Yes
Field Number: West Wall-S Date Sampled 7/30/03	Lab ID 963	Sample Type: 1	Date Analyzed: 8/11/03 Proper Preservation	for 8270 BN soil Yes
Field Number: West Wall-S Date Sampled 7/30/03	Lab ID 963	Sample Type: 1	Date Analyzed: 8/6/03 Proper Preservation	for EPH soil Yes
Field Number: West Wall-S Date Sampled 7/30/03	Lab ID 963	Sample Type: 1	Date Analyzed: 8/5/03 Proper Preservation	for VPH soil Yes
Field Number: North Wall Date Sampled 7/30/03	Lab ID 964	Sample Type: 1	Date Analyzed: 8/8/03 Proper Preservation	for 8260 soil Yes
Field Number: North Wall Date Sampled 7/30/03	Lab ID 964	Sample Type: 1	Date Analyzed: 8/11/03 Proper Preservation	for 8270 BN soil Yes
Field Number: North Wall Date Sampled 7/30/03	Lab ID 964	Sample Type: 1	Date Analyzed: 8/6/03 Proper Preservation	for EPH soil Yes

3



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# GeoChem, Incorporated

## Environmental Laboratories

### Certified Analytical Laboratory

NC # 37745, NC # 336, NC # 461, EPA ID # 155

**Client Project Manager**

Robert H. Livermon, Jr.

**Site Name:**

S. Blount St.

**Geologix**

5316 Deep Valley Run

Raleigh

NC 27606

**Report Date**

Tuesday, August 26, 2003

**PO #****Date Received in lab:**

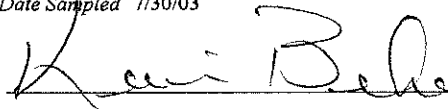
Monday, August 04, 2003

**GCI Project #: 0308-003**

### Summary of requested analytical work

Sample type code #s :	1 = solid samples;	2 = liquid samples;	3 = Air samples;	4 = sludges/unknowns
Field Number: North Wall	Lab ID 964	Sample Type: 1	Date Analyzed: 8/5/03	for VPH soil
Date Sampled 7/30/03			Proper Preservation	Yes
Field Number: East Wall-N	Lab ID 965	Sample Type: 1	Date Analyzed: 8/8/03	for 8260 soil
Date Sampled 7/30/03			Proper Preservation	Yes
Field Number: East Wall-N	Lab ID 965	Sample Type: 1	Date Analyzed: 8/5/03	for VPH soil
Date Sampled 7/30/03			Proper Preservation	Yes
Field Number: East Wall-S	Lab ID 966	Sample Type: 1	Date Analyzed: 8/8/03	for 8260 soil
Date Sampled 7/30/03			Proper Preservation	Yes
Field Number: East Wall-S	Lab ID 966	Sample Type: 1	Date Analyzed: 8/5/03	for VPH soil
Date Sampled 7/30/03			Proper Preservation	Yes
Field Number: South Wall	Lab ID 967	Sample Type: 1	Date Analyzed: 8/8/03	for 8260 soil
Date Sampled 7/30/03			Proper Preservation	Yes
Field Number: South Wall	Lab ID 967	Sample Type: 1	Date Analyzed: 8/11/03	for 8270 BN soil
Date Sampled 7/30/03			Proper Preservation	Yes
Field Number: South Wall	Lab ID 967	Sample Type: 1	Date Analyzed: 8/6/03	for EPH soil
Date Sampled 7/30/03			Proper Preservation	Yes
Field Number: South Wall	Lab ID 967	Sample Type: 1	Date Analyzed: 8/5/03	for VPH soil
Date Sampled 7/30/03			Proper Preservation	Yes

3



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# GeoChem, Incorporated

## Environmental Laboratories

### *Certified Analytical Laboratory*

NC # 37745 , NC # 336, NC # 461, EPA ID # 155

**Client Project Manager**

Robert H. Livermon, Jr.

**Site Name:**

S. Blount St.

**Geologix**

5316 Deep Valley Run

Raleigh NC 27606

**Report Date**

Tuesday, August 26, 2003

**PO #**

**Date Received in lab:**

Monday, August 04, 2003

**GCI Project #: 0308-003**

### *Summary of requested analytical work*

**Sample type code #s :**

1 = solid samples;

2 = liquid samples;

3 = Air samples;

4 = sludges/unknowns

Field Number: Exp. Bottom

Lab ID 968

Sample Type: 1 Date Analyzed: 8/8/03

for 8260 soil

Date Sampled 7/30/03

Proper Preservation

Yes

Field Number: Exp. Bottom

Lab ID 968

Sample Type: 1 Date Analyzed: 8/5/03

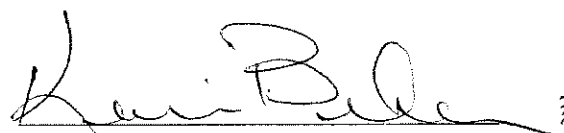
for VPH soil

Date Sampled 7/30/03

Proper Preservation

Yes

3



Here by certify that I have Reviewed and approve this data set

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155

Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	West Wall-N	Lab ID 962	Conc. in ug/kg	PQL in ug/kg
	Dry wt % 82.9	Date Analyzed: 8/8/03		
8260 soil		Lab ID 962		
		MTBE	BDL	5.0
		IPE	BDL	5.0
		n-Butylbenzene	BDL	5.0
		Dichlorodifluoromethane	BDL	5.0
		Chloromethane	BDL	5.0
		Vinyl Chloride	BDL	5.0
		Bromomethane	BDL	5.0
		Chloroethane	BDL	5.0
		Trichlorofluoromethane	BDL	5.0
		Acrolein	BDL	24.9
		Acetone	BDL	24.9
		1,1-Dichloroethene	BDL	5.0
		Iodomethane	BDL	5.0
		Carbon Disulfide	BDL	5.0
		Methylene Chloride	BDL	5.0
		Acrylonitrile	BDL	5.0
		trans-1,2-Dichloroethene	BDL	5.0
		1,1-Dichloroethane	BDL	5.0
		Vinyl Acetate	BDL	5.0
		2,2-Dichloropropane	BDL	5.0
		cis-1,2-Dichloroethene	BDL	5.0
		2-Butanone	BDL	24.9
		Bromochloromethane	BDL	5.0
		Chloroform	BDL	5.0
		1,1,1-Trichloroethane	BDL	5.0
		1,1-Dichloropropene	BDL	5.0
		Carbon Tetrachloride	BDL	5.0
		Benzene	BDL	5.0
		1,2-Dichloroethane	BDL	5.0
		Trichloroethene	BDL	5.0
		1,2-Dichloropropane	BDL	5.0
		Dibromomethane	BDL	5.0
		Bromodichloromethane	BDL	5.0
		2-Chloroethylvinylether	BDL	5.0
		cis-1,3-Dichloropropene	BDL	5.0
		4-Methyl-2-pentanone	BDL	5.0
		Toluene	BDL	5.0
		trans-1,3-Dichloropropene	BDL	5.0
		1,1,2-Trichloroethane	BDL	5.0
		Ethylmethacrylate	BDL	5.0
		Tetrachloroethene	BDL	5.0
		1,3-Dichloropropane	BDL	5.0

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155

Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	West Wall-N	Lab ID 962		
	Dry wt %	82.9	Date Analyzed: 8/8/03	Conc. in ug/kg
				PQL in ug/kg
			2-Hexanone	BDL 9.9
			Chlorodibromomethane	BDL 5.0
			1,2-Dibromoethane	BDL 5.0
			Chlorobenzene	BDL 5.0
			1,1,1,2-Tetrachloroethane	BDL 5.0
			Ethylbenzene	BDL 5.0
			m,p-Xylene	10.0 5.0
			o-Xylene	7.3 5.0
			Styrene	BDL 5.0
			Bromoform	BDL 5.0
			Isopropylbenzene	BDL 5.0
			Bromobenzene	BDL 5.0
			1,2,3-Trichloropropane	BDL 5.0
			1,1,2,2-Tetrachloroethane	BDL 5.0
			n-Propylbenzene	6.1 5.0
			2-Chlorotoluene	BDL 5.0
			1,4-Dichloro-2-butene	BDL 5.0
			4-Chlorotoluene	BDL 5.0
			1,3,5-Trimethylbenzene	29.8 5.0
			tert-Butylbenzene	BDL 5.0
			1,2,4-Trimethylbenzene	85.4 5.0
			sec-Butylbenzene	BDL 5.0
			1,3-Dichlorobenzene	BDL 5.0
			1,4-Dichlorobenzene	BDL 5.0
			4-Isopropyltoluene	BDL 5.0
			1,2-Dichlorobenzene	BDL 5.0
			1,2-Dibromo-3-chloropropan	BDL 5.0
			1,2,4-Trichlorobenzene	BDL 5.0
			Naphthalene	62.7 5.0
			Hexachlorobutadiene	BDL 5.0
			1,2,3-Trichlorobenzene	BDL 5.0

End of 8260 soil

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155

Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	West Wall-S	Lab ID 963	Conc. in ug/kg	PQL in ug/kg
	Dry wt % 81.6	Date Analyzed: 8/8/03		
8260 soil		Lab ID 963		
		MTBE	BDL	4.9
		IPE	BDL	4.9
		n-Butylbenzene	BDL	4.9
		Dichlorodifluoromethane	BDL	4.9
		Chloromethane	BDL	4.9
		Vinyl Chloride	BDL	4.9
		Bromomethane	BDL	4.9
		Chloroethane	BDL	4.9
		Trichlorofluoromethane	BDL	4.9
		Acrolein	BDL	24.7
		Acetone	BDL	24.7
		1,1-Dichloroethene	BDL	4.9
		Iodomethane	BDL	4.9
		Carbon Disulfide	BDL	4.9
		Methylene Chloride	BDL	4.9
		Acrylonitrile	BDL	4.9
		trans-1,2-Dichloroethene	BDL	4.9
		1,1-Dichloroethane	BDL	4.9
		Vinyl Acetate	BDL	4.9
		2,2-Dichloropropane	BDL	4.9
		cis-1,2-Dichloroethene	BDL	4.9
		2-Butanone	BDL	24.7
		Bromochloromethane	BDL	4.9
		Chloroform	BDL	4.9
		1,1,1-Trichloroethane	BDL	4.9
		1,1-Dichloropropene	BDL	4.9
		Carbon Tetrachloride	BDL	4.9
		Benzene	BDL	4.9
		1,2-Dichloroethane	BDL	4.9
		Trichloroethene	BDL	4.9
		1,2-Dichloropropane	BDL	4.9
		Dibromomethane	BDL	4.9
		Bromodichloromethane	BDL	4.9
		2-Chloroethylvinylether	BDL	4.9
		cis-1,3-Dichloropropene	BDL	4.9
		4-Methyl-2-pentanone	BDL	4.9
		Toluene	BDL	4.9
		trans-1,3-Dichloropropene	BDL	4.9
		1,1,2-Trichloroethane	BDL	4.9
		Ethylmethacrylate	BDL	4.9
		Tetrachloroethene	BDL	4.9
		1,3-Dichloropropane	BDL	4.9

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155  
Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	West Wall-S	Lab ID 963		
	Dry wt % 81.6	Date Analyzed: 8/8/03	Conc. in ug/kg	PQL in ug/kg
		2-Hexanone	BDL	9.9
		Chlorodibromomethane	BDL	4.9
		1,2-Dibromoethane	BDL	4.9
		Chlorobenzene	BDL	4.9
		1,1,1,2-Tetrachloroethane	BDL	4.9
		Ethylbenzene	BDL	4.9
		m,p-Xylene	7.5	4.9
		o-Xylene	BDL	4.9
		Styrene	BDL	4.9
		Bromoform	BDL	4.9
		Isopropylbenzene	BDL	4.9
		Bromobenzene	BDL	4.9
		1,2,3-Trichloropropane	BDL	4.9
		1,1,2,2-Tetrachloroethane	BDL	4.9
		n-Propylbenzene	BDL	4.9
		2-Chlorotoluene	BDL	4.9
		1,4-Dichloro-2-butene	BDL	4.9
		4-Chlorotoluene	BDL	4.9
		1,3,5-Trimethylbenzene	20.3	4.9
		tert-Butylbenzene	BDL	4.9
		1,2,4-Trimethylbenzene	64.3	4.9
		sec-Butylbenzene	BDL	4.9
		1,3-Dichlorobenzene	BDL	4.9
		1,4-Dichlorobenzene	BDL	4.9
		4-Isopropyltoluene	BDL	4.9
		1,2-Dichlorobenzene	BDL	4.9
		1,2-Dibromo-3-chloropropan	BDL	4.9
		1,2,4-Trichlorobenzene	BDL	4.9
		Naphthalene	53.8	4.9
		Hexachlorobutadiene	BDL	4.9
		1,2,3-Trichlorobenzene	BDL	4.9

End of 8260 soil

8270 BN soil

Lab ID 963		
n-Nitrosodimethylamine	BDL	100.0
Aniline	BDL	100.0
Bis(2-chloroethyl)ether	BDL	100.0
1,3-Dichlorobenzene	BDL	100.0
1,4-Dichlorobenzene	BDL	100.0
1,2-Dichlorobenzene	BDL	100.0
Benzyl Alcohol	BDL	100.0
Bis(2-chloroisopropyl)ether	BDL	100.0
Hexachloroethane	BDL	100.0
n-Nitrosodipropylamine	BDL	100.0

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155  
Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	West Wall-S	Lab ID 963		
Dry wt %	81.2	Date Analyzed: 8/11/03	Conc. in ug/kg	PQL in ug/kg
		Nitrobenzene	BDL	100.0
		Isophorone	BDL	100.0
		Bis(2-chloroethoxy)methane	BDL	100.0
		1,2,4-Trichlorobenzene	BDL	100.0
		Naphthalene	BDL	100.0
		Benzoic acid	BDL	100.0
		4-Chloroaniline	BDL	100.0
		Hexachlorobutadiene	BDL	100.0
		2-Methylnaphthalene	BDL	100.0
		Hexachlorocyclopentadiene	BDL	100.0
		2-Chloronaphthalene	BDL	100.0
		2-Nitroaniline	BDL	100.0
		Acenaphthylene	BDL	100.0
		Dimethylphthalate	BDL	100.0
		2,6-Dinitrotoluene	BDL	100.0
		Acenaphthene	BDL	100.0
		3-Nitroaniline	BDL	100.0
		Dibenzofuran	BDL	100.0
		2,4-Dinitrotoluene	BDL	100.0
		Fluorene	BDL	100.0
		4-Chlorophenyl Phenyl Ether	BDL	100.0
		Diethylphthalate	BDL	100.0
		4-Nitroaniline	BDL	100.0
		n-Nitrosodiphenylamine	BDL	100.0
		4-Bromophenyl Phenyl Ether	BDL	100.0
		Hexachlorobenzene	BDL	100.0
		Benzidine	BDL	100.0
		Phenanthrene	BDL	100.0
		Anthracene	BDL	100.0
		Di-n-butylphthalate	BDL	100.0
		Fluoranthene	BDL	100.0
		Pyrene	BDL	100.0
		Butyl Benzyl Phthalate	BDL	100.0
		Benzo(a)anthracene	BDL	100.0
		3,3'-Dichlorobenzidine	BDL	100.0
		Chrysene	BDL	100.0
		Bis(2-ethylhexyl)phthalate	BDL	100.0
		Di-n-octylphthalate	BDL	100.0
		Benzo(b)fluoranthene	BDL	100.0
		Benzo(k)fluoranthene	BDL	100.0
		Benzo(a)pyrene	BDL	100.0
		Indeno(1,2,3-cd)pyrene	BDL	100.0
		Dibenz(a,h)anthracene	BDL	100.0



# ***GeoChem Incorporated Certified Analytical Laboratory***

***Site Name:***

***NC # 37745 , NC # 336, EPA ID # 155***

***S. Blount St.***

***Tuesday, August 26, 2003***

***GCI Project # 0308-003***

**Field ID West Wall-S**

***Lab ID 963***

**Dry wt % 81.2**

***Date Analyzed: 8/11/03***

**Conc. in ug/kg**

**PQL in ug/kg**

**Benzo(g,h,i)perylene**

**BDL**

**100.0**

**Azobenzene**

**BDL**

**100.0**

***End of 8270 BN soil***

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155

Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	North Wall	Lab ID 964		
	Dry wt % 76.8	Date Analyzed: 8/8/03	Conc. in ug/kg	PQL in ug/kg
	8260 soil	Lab ID 964		
		MTBE	BDL	4.9
		IPE	BDL	4.9
		n-Butylbenzene	BDL	4.9
		Dichlorodifluoromethane	BDL	4.9
		Chloromethane	BDL	4.9
		Vinyl Chloride	BDL	4.9
		Bromomethane	BDL	4.9
		Chloroethane	BDL	4.9
		Trichlorofluoromethane	BDL	4.9
		Acrolein	BDL	24.7
		Acetone	BDL	24.7
		1,1-Dichloroethene	BDL	4.9
		Iodomethane	BDL	4.9
		Carbon Disulfide	BDL	4.9
		Methylene Chloride	BDL	4.9
		Acrylonitrile	BDL	4.9
		trans-1,2-Dichloroethene	BDL	4.9
		1,1-Dichloroethane	BDL	4.9
		Vinyl Acetate	BDL	4.9
		2,2-Dichloropropane	BDL	4.9
		cis-1,2-Dichloroethene	BDL	4.9
		2-Butanone	BDL	24.7
		Bromochloromethane	BDL	4.9
		Chloroform	BDL	4.9
		1,1,1-Trichloroethane	BDL	4.9
		1,1-Dichloropropene	BDL	4.9
		Carbon Tetrachloride	BDL	4.9
		Benzene	BDL	4.9
		1,2-Dichloroethane	BDL	4.9
		Trichloroethene	BDL	4.9
		1,2-Dichloropropane	BDL	4.9
		Dibromomethane	BDL	4.9
		Bromodichloromethane	BDL	4.9
		2-Chloroethylvinylether	BDL	4.9
		cis-1,3-Dichloropropene	BDL	4.9
		4-Methyl-2-pentanone	BDL	4.9
		Toluene	27.3	4.9
		trans-1,3-Dichloropropene	BDL	4.9
		1,1,2-Trichloroethane	BDL	4.9
		Ethylmethacrylate	BDL	4.9
		Tetrachloroethene	BDL	4.9
		1,3-Dichloropropane	BDL	4.9

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155

Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	North Wall	Lab ID 964	Conc. in ug/kg	PQL in ug/kg
Dry wt %	76.8	Date Analyzed: 8/8/03		
		2-Hexanone	BDL	9.9
		Chlorodibromomethane	BDL	4.9
		1,2-Dibromoethane	BDL	4.9
		Chlorobenzene	BDL	4.9
		1,1,1,2-Tetrachloroethane	BDL	4.9
		Ethylbenzene	234.9	4.9
		m,p-Xylene	5,323.3	500.0
		o-Xylene	2,316.8	500.0
		Styrene	BDL	4.9
		Bromoform	BDL	4.9
		Isopropylbenzene	132.2	4.9
		Bromobenzene	BDL	4.9
		1,2,3-Trichloropropane	BDL	4.9
		1,1,2,2-Tetrachloroethane	BDL	4.9
		n-Propylbenzene	2,290.7	500.0
		2-Chlorotoluene	BDL	4.9
		1,4-Dichloro-2-butene	BDL	4.9
		4-Chlorotoluene	BDL	4.9
		1,3,5-Trimethylbenzene	6,611.9	500.0
		tert-Butylbenzene	BDL	4.9
		1,2,4-Trimethylbenzene	20,434.3	500.0
		sec-Butylbenzene	134.8	4.9
		1,3-Dichlorobenzene	BDL	4.9
		1,4-Dichlorobenzene	BDL	4.9
		4-Isopropyltoluene	142.5	4.9
		1,2-Dichlorobenzene	BDL	4.9
		1,2-Dibromo-3-chloropropan	BDL	4.9
		1,2,4-Trichlorobenzene	BDL	4.9
		Naphthalene	5,713.8	500.0
		Hexachlorobutadiene	BDL	4.9
		1,2,3-Trichlorobenzene	BDL	4.9

End of 8260 soil

8270 BN soil

Lab ID 964	
n-Nitrosodimethylamine	BDL 100.0
Aniline	BDL 100.0
Bis(2-chloroethyl)ether	BDL 100.0
1,3-Dichlorobenzene	BDL 100.0
1,4-Dichlorobenzene	BDL 100.0
1,2-Dichlorobenzene	BDL 100.0
Benzyl Alcohol	BDL 100.0
Bis(2-chloroisopropyl)ether	BDL 100.0
Hexachloroethane	BDL 100.0
n-Nitrosodipropylamine	BDL 100.0

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745, NC # 336, EPA ID # 155  
Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	North Wall	Lab ID 964		
Dry wt %	76.8	Date Analyzed: 8/11/03	Conc. in ug/kg	PQL in ug/kg
		Nitrobenzene	BDL	100.0
		Isophorone	BDL	100.0
		Bis(2-chloroethoxy)methane	BDL	100.0
		1,2,4-Trichlorobenzene	BDL	100.0
		Naphthalene	2,277.7	100.0
		Benzoic acid	BDL	100.0
		4-Chloroaniline	BDL	100.0
		Hexachlorobutadiene	BDL	100.0
		2-Methylnaphthalene	3,865.6	100.0
		Hexachlorocyclopentadiene	BDL	100.0
		2-Chloronaphthalene	BDL	100.0
		2-Nitroaniline	BDL	100.0
		Acenaphthylene	BDL	100.0
		Dimethylphthalate	BDL	100.0
		2,6-Dinitrotoluene	BDL	100.0
		Acenaphthene	BDL	100.0
		3-Nitroaniline	BDL	100.0
		Dibenzofuran	BDL	100.0
		2,4-Dinitrotoluene	BDL	100.0
		Fluorene	BDL	100.0
		4-Chlorophenyl Phenyl Ether	BDL	100.0
		Diethylphthalate	BDL	100.0
		4-Nitroaniline	BDL	100.0
		n-Nitrosodiphenylamine	BDL	100.0
		4-Bromophenyl Phenyl Ether	BDL	100.0
		Hexachlorobenzene	BDL	100.0
		Benzidine	BDL	100.0
		Phenanthrene	BDL	100.0
		Anthracene	BDL	100.0
		Di-n-butylphthalate	BDL	100.0
		Fluoranthene	BDL	100.0
		Pyrene	BDL	100.0
		Butyl Benzyl Phthalate	BDL	100.0
		Benzo(a)anthracene	BDL	100.0
		3,3'-Dichlorobenzidine	BDL	100.0
		Chrysene	BDL	100.0
		Bis(2-ethylhexyl)phthalate	BDL	100.0
		Di-n-octylphthalate	BDL	100.0
		Benzo(b)fluoranthene	BDL	100.0
		Benzo(k)fluoranthene	BDL	100.0
		Benzo(a)pyrene	BDL	100.0
		Indeno(1,2,3-cd)pyrene	BDL	100.0
		Dibenz(a,h)anthracene	BDL	100.0

# ***GeoChem Incorporated Certified Analytical Laboratory***

**Site Name:**  
**S. Blount St.**

**NC # 37745 , NC # 336, EPA ID # 155**  
**Tuesday, August 26, 2003**

**GCI Project # 0308-003**

**Field ID North Wall**

**Lab ID 964**

**Dry wt % 76.8**

**Date Analyzed: 8/11/03**

**Conc. in ug/kg**

**PQL in ug/kg**

**Benzo(g,h,i)perylene**

**BDL**

**100.0**

**Azobenzene**

**BDL**

**100.0**

**End of 8270 BN soil**

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155

Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	East Wall-N	Lab ID 965	Conc. in ug/kg	PQL in ug/kg
	Dry wt % 80.2	Date Analyzed: 8/8/03		
	8260 soil	Lab ID 965		
		MTBE	BDL	5.1
		IPE	BDL	5.1
		n-Butylbenzene	BDL	5.1
		Dichlorodifluoromethane	BDL	5.1
		Chloromethane	BDL	5.1
		Vinyl Chloride	BDL	5.1
		Bromomethane	BDL	5.1
		Chloroethane	BDL	5.1
		Trichlorofluoromethane	BDL	5.1
		Acrolein	BDL	25.4
		Acetone	BDL	25.4
		1,1-Dichloroethene	BDL	5.1
		Iodomethane	BDL	5.1
		Carbon Disulfide	BDL	5.1
		Methylene Chloride	BDL	5.1
		Acrylonitrile	BDL	5.1
		trans-1,2-Dichloroethene	BDL	5.1
		1,1-Dichloroethane	BDL	5.1
		Vinyl Acetate	BDL	5.1
		2,2-Dichloropropane	BDL	5.1
		cis-1,2-Dichloroethene	BDL	5.1
		2-Butanone	BDL	25.4
		Bromochloromethane	BDL	5.1
		Chloroform	BDL	5.1
		1,1,1-Trichloroethane	BDL	5.1
		1,1-Dichloropropene	BDL	5.1
		Carbon Tetrachloride	BDL	5.1
		Benzene	BDL	5.1
		1,2-Dichloroethane	BDL	5.1
		Trichloroethene	BDL	5.1
		1,2-Dichloropropane	BDL	5.1
		Dibromomethane	BDL	5.1
		Bromodichloromethane	BDL	5.1
		2-Chloroethylvinylether	BDL	5.1
		cis-1,3-Dichloropropene	BDL	5.1
		4-Methyl-2-pentanone	BDL	5.1
		Toluene	BDL	5.1
		trans-1,3-Dichloropropene	BDL	5.1
		1,1,2-Trichloroethane	BDL	5.1
		Ethylmethacrylate	BDL	5.1
		Tetrachloroethene	BDL	5.1
		1,3-Dichloropropane	BDL	5.1

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155  
Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	East Wall-N	Lab ID 965		
Dry wt %	80.2	Date Analyzed: 8/8/03	Conc. in ug/kg	PQL in ug/kg
		2-Hexanone	BDL	10.1
		Chlorodibromomethane	BDL	5.1
		1,2-Dibromoethane	BDL	5.1
		Chlorobenzene	BDL	5.1
		1,1,1,2-Tetrachloroethane	BDL	5.1
		Ethylbenzene	BDL	5.1
		m,p-Xylene	8.1	5.1
		o-Xylene	BDL	5.1
		Styrene	BDL	5.1
		Bromoform	BDL	5.1
		Isopropylbenzene	BDL	5.1
		Bromobenzene	BDL	5.1
		1,2,3-Trichloropropane	BDL	5.1
		1,1,2,2-Tetrachloroethane	BDL	5.1
		n-Propylbenzene	BDL	5.1
		2-Chlorotoluene	BDL	5.1
		1,4-Dichloro-2-butene	BDL	5.1
		4-Chlorotoluene	BDL	5.1
		1,3,5-Trimethylbenzene	19.2	5.1
		tert-Butylbenzene	BDL	5.1
		1,2,4-Trimethylbenzene	35.2	5.1
		sec-Butylbenzene	BDL	5.1
		1,3-Dichlorobenzene	BDL	5.1
		1,4-Dichlorobenzene	BDL	5.1
		4-Isopropyltoluene	BDL	5.1
		1,2-Dichlorobenzene	BDL	5.1
		1,2-Dibromo-3-chloropropan	BDL	5.1
		1,2,4-Trichlorobenzene	BDL	5.1
		Naphthalene	BDL	5.1
		Hexachlorobutadiene	BDL	5.1
		1,2,3-Trichlorobenzene	BDL	5.1

End of 8260 soil



# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155  
Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	East Wall-S	Lab ID 966		
	Dry wt % 80.2	Date Analyzed: 8/8/03	Conc. in ug/kg	PQL in ug/kg
	8260 soil	Lab ID 966		
		MTBE	BDL	4.9
		IPE	BDL	4.9
		n-Butylbenzene	BDL	4.9
		Dichlorodifluoromethane	BDL	4.9
		Chloromethane	BDL	4.9
		Vinyl Chloride	BDL	4.9
		Bromomethane	BDL	4.9
		Chloroethane	BDL	4.9
		Trichlorofluoromethane	BDL	4.9
		Acrolein	BDL	24.7
		Acetone	BDL	24.7
		1,1-Dichloroethene	BDL	4.9
		Iodomethane	BDL	4.9
		Carbon Disulfide	BDL	4.9
		Methylene Chloride	BDL	4.9
		Acrylonitrile	BDL	4.9
		trans-1,2-Dichloroethene	BDL	4.9
		1,1-Dichloroethane	BDL	4.9
		Vinyl Acetate	BDL	4.9
		2,2-Dichloropropane	BDL	4.9
		cis-1,2-Dichloroethene	BDL	4.9
		2-Butanone	BDL	24.7
		Bromochloromethane	BDL	4.9
		Chloroform	BDL	4.9
		1,1,1-Trichloroethane	BDL	4.9
		1,1-Dichloropropene	BDL	4.9
		Carbon Tetrachloride	BDL	4.9
		Benzene	BDL	4.9
		1,2-Dichloroethane	BDL	4.9
		Trichloroethene	BDL	4.9
		1,2-Dichloropropane	BDL	4.9
		Dibromomethane	BDL	4.9
		Bromodichloromethane	BDL	4.9
		2-Chloroethylvinylether	BDL	4.9
		cis-1,3-Dichloropropene	BDL	4.9
		4-Methyl-2-pentanone	BDL	4.9
		Toluene	BDL	4.9
		trans-1,3-Dichloropropene	BDL	4.9
		1,1,2-Trichloroethane	BDL	4.9
		Ethylmethacrylate	BDL	4.9
		Tetrachloroethene	BDL	4.9
		1,3-Dichloropropane	BDL	4.9

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155  
Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	East Wall-S	Lab ID 966		
	Dry wt %	80.2	Date Analyzed: 8/8/03	Conc. in ug/kg
				PQL in ug/kg
			2-Hexanone	BDL
			Chlorodibromomethane	BDL
			1,2-Dibromoethane	BDL
			Chlorobenzene	BDL
			1,1,1,2-Tetrachloroethane	BDL
			Ethylbenzene	BDL
			m,p-Xylene	BDL
			o-Xylene	BDL
			Styrene	BDL
			Bromoform	BDL
			Isopropylbenzene	BDL
			Bromobenzene	BDL
			1,2,3-Trichloropropane	BDL
			1,1,2,2-Tetrachloroethane	BDL
			n-Propylbenzene	BDL
			2-Chlorotoluene	BDL
			1,4-Dichloro-2-butene	BDL
			4-Chlorotoluene	BDL
			1,3,5-Trimethylbenzene	5.9
			tert-Butylbenzene	BDL
			1,2,4-Trimethylbenzene	19.3
			sec-Butylbenzene	BDL
			1,3-Dichlorobenzene	BDL
			1,4-Dichlorobenzene	BDL
			4-Isopropyltoluene	BDL
			1,2-Dichlorobenzene	BDL
			1,2-Dibromo-3-chloropropan	BDL
			1,2,4-Trichlorobenzene	BDL
			Naphthalene	38.9
			Hexachlorobutadiene	BDL
			1,2,3-Trichlorobenzene	BDL

End of 8260 soil

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155  
Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	South Wall	Lab ID 967		
	Dry wt % 83.8	Date Analyzed: 8/8/03	Conc. in ug/kg	PQL in ug/kg
	8260 soil	Lab ID 967		
		MTBE	BDL	5.0
		IPE	BDL	5.0
		n-Butylbenzene	BDL	5.0
		Dichlorodifluoromethane	BDL	5.0
		Chloromethane	BDL	5.0
		Vinyl Chloride	BDL	5.0
		Bromomethane	BDL	5.0
		Chloroethane	BDL	5.0
		Trichlorofluoromethane	BDL	5.0
		Acrolein	BDL	25.0
		Acetone	BDL	25.0
		1,1-Dichloroethene	BDL	5.0
		Iodomethane	BDL	5.0
		Carbon Disulfide	BDL	5.0
		Methylene Chloride	BDL	5.0
		Acrylonitrile	BDL	5.0
		trans-1,2-Dichloroethene	BDL	5.0
		1,1-Dichloroethane	BDL	5.0
		Vinyl Acetate	BDL	5.0
		2,2-Dichloropropane	BDL	5.0
		cis-1,2-Dichloroethene	BDL	5.0
		2-Butanone	BDL	25.0
		Bromochloromethane	BDL	5.0
		Chloroform	BDL	5.0
		1,1,1-Trichloroethane	BDL	5.0
		1,1-Dichloropropene	BDL	5.0
		Carbon Tetrachloride	BDL	5.0
		Benzene	BDL	5.0
		1,2-Dichloroethane	BDL	5.0
		Trichloroethene	BDL	5.0
		1,2-Dichloropropane	BDL	5.0
		Dibromomethane	BDL	5.0
		Bromodichloromethane	BDL	5.0
		2-Chloroethylvinylether	BDL	5.0
		cis-1,3-Dichloropropene	BDL	5.0
		4-Methyl-2-pentanone	BDL	5.0
		Toluene	BDL	5.0
		trans-1,3-Dichloropropene	BDL	5.0
		1,1,2-Trichloroethane	BDL	5.0
		Ethylmethacrylate	BDL	5.0
		Tetrachloroethene	BDL	5.0
		1,3-Dichloropropane	BDL	5.0

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:

NC # 37745 , NC # 336, EPA ID # 155

S. Blount St.

Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	South Wall	Lab ID 967		
Dry wt %	83.8	Date Analyzed: 8/8/03	Conc. in ug/kg	PQL in ug/kg
		2-Hexanone	BDL	10.0
		Chlorodibromomethane	BDL	5.0
		1,2-Dibromoethane	BDL	5.0
		Chlorobenzene	BDL	5.0
		1,1,1,2-Tetrachloroethane	BDL	5.0
		Ethylbenzene	BDL	5.0
		m,p-Xylene	BDL	5.0
		o-Xylene	BDL	5.0
		Styrene	BDL	5.0
		Bromoform	BDL	5.0
		Isopropylbenzene	BDL	5.0
		Bromobenzene	BDL	5.0
		1,2,3-Trichloropropane	BDL	5.0
		1,1,2,2-Tetrachloroethane	BDL	5.0
		n-Propylbenzene	BDL	5.0
		2-Chlorotoluene	BDL	5.0
		1,4-Dichloro-2-butene	BDL	5.0
		4-Chlorotoluene	BDL	5.0
		1,3,5-Trimethylbenzene	BDL	5.0
		tert-Butylbenzene	BDL	5.0
		1,2,4-Trimethylbenzene	BDL	5.0
		sec-Butylbenzene	BDL	5.0
		1,3-Dichlorobenzene	BDL	5.0
		1,4-Dichlorobenzene	BDL	5.0
		4-Isopropyltoluene	BDL	5.0
		1,2-Dichlorobenzene	BDL	5.0
		1,2-Dibromo-3-chloropropan	BDL	5.0
		1,2,4-Trichlorobenzene	BDL	5.0
		Naphthalene	BDL	5.0
		Hexachlorobutadiene	BDL	5.0
		1,2,3-Trichlorobenzene	BDL	5.0

End of 8260 soil

8270 BN soil

Lab ID 967		
n-Nitrosodimethylamine	BDL	100.0
Aniline	BDL	100.0
Bis(2-chloroethyl)ether	BDL	100.0
1,3-Dichlorobenzene	BDL	100.0
1,4-Dichlorobenzene	BDL	100.0
1,2-Dichlorobenzene	BDL	100.0
Benzyl Alcohol	BDL	100.0
Bis(2-chloroisopropyl)ether	BDL	100.0
Hexachloroethane	BDL	100.0
n-Nitrosodipropylamine	BDL	100.0

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155  
Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	South Wall	Lab ID 967	Conc. in ug/kg	PQL in ug/kg
	Dry wt % 83.8	Date Analyzed: 8/11/03		
		Nitrobenzene	BDL	100.0
		Isophorone	BDL	100.0
		Bis(2-chloroethoxy)methane	BDL	100.0
		1,2,4-Trichlorobenzene	BDL	100.0
		Naphthalene	BDL	100.0
		Benzoic acid	BDL	100.0
		4-Chloroaniline	BDL	100.0
		Hexachlorobutadiene	BDL	100.0
		2-Methylnaphthalene	BDL	100.0
		Hexachlorocyclopentadiene	BDL	100.0
		2-Chloronaphthalene	BDL	100.0
		2-Nitroaniline	BDL	100.0
		Acenaphthylene	BDL	100.0
		Dimethylphthalate	BDL	100.0
		2,6-Dinitrotoluene	BDL	100.0
		Acenaphthene	BDL	100.0
		3-Nitroaniline	BDL	100.0
		Dibenzofuran	BDL	100.0
		2,4-Dinitrotoluene	BDL	100.0
		Fluorene	BDL	100.0
		4-Chlorophenyl Phenyl Ether	BDL	100.0
		Diethylphthalate	BDL	100.0
		4-Nitroaniline	BDL	100.0
		n-Nitrosodiphenylamine	BDL	100.0
		4-Bromophenyl Phenyl Ether	BDL	100.0
		Hexachlorobenzene	BDL	100.0
		Benzidine	BDL	100.0
		Phenanthrene	BDL	100.0
		Anthracene	BDL	100.0
		Di-n-butylphthalate	BDL	100.0
		Fluoranthene	BDL	100.0
		Pyrene	BDL	100.0
		Butyl Benzyl Phthalate	BDL	100.0
		Benzo(a)anthracene	BDL	100.0
		3,3'-Dichlorobenzidine	BDL	100.0
		Chrysene	BDL	100.0
		Bis(2-ethylhexyl)phthalate	BDL	100.0
		Di-n-octylphthalate	BDL	100.0
		Benzo(b)fluoranthene	BDL	100.0
		Benzo(k)fluoranthene	BDL	100.0
		Benzo(a)pyrene	BDL	100.0
		Indeno(1,2,3-cd)pyrene	BDL	100.0
		Dibenz(a,h)anthracene	BDL	100.0

# ***GeoChem Incorporated Certified Analytical Laboratory***

***Site Name:***

***NC # 37745 , NC # 336, EPA ID # 155***

***S. Blount St.***

***Tuesday, August 26, 2003***

***GCI Project # 0308-003***

**Field ID South Wall**

***Lab ID 967***

**Dry wt % 83.8**

***Date Analyzed: 8/11/03***

**Conc. in ug/kg**

**PQL in ug/kg**

**Benzo(g,h,i)perylene**

**BDL**

**100.0**

**Azobenzene**

**BDL**

**100.0**

***End of 8270 BN soil***

# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155  
Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	Exp. Bottom	Lab ID 968		
	Dry wt % 81.3	Date Analyzed: 8/8/03	Conc. in ug/kg	PQL in ug/kg
8260 soil		Lab ID 968		
		MTBE	BDL	5.0
		IPE	BDL	5.0
		n-Butylbenzene	BDL	5.0
		Dichlorodifluoromethane	BDL	5.0
		Chloromethane	BDL	5.0
		Vinyl Chloride	BDL	5.0
		Bromomethane	BDL	5.0
		Chloroethane	BDL	5.0
		Trichlorofluoromethane	BDL	5.0
		Acrolein	BDL	25.2
		Acetone	BDL	25.2
		1,1-Dichloroethene	BDL	5.0
		Iodomethane	BDL	5.0
		Carbon Disulfide	BDL	5.0
		Methylene Chloride	BDL	5.0
		Acrylonitrile	BDL	5.0
		trans-1,2-Dichloroethene	BDL	5.0
		1,1-Dichloroethane	BDL	5.0
		Vinyl Acetate	BDL	5.0
		2,2-Dichloropropane	BDL	5.0
		cis-1,2-Dichloroethene	BDL	5.0
		2-Butanone	BDL	25.2
		Bromochloromethane	BDL	5.0
		Chloroform	BDL	5.0
		1,1,1-Trichloroethane	BDL	5.0
		1,1-Dichloropropene	BDL	5.0
		Carbon Tetrachloride	BDL	5.0
		Benzene	BDL	5.0
		1,2-Dichloroethane	BDL	5.0
		Trichloroethene	BDL	5.0
		1,2-Dichloropropane	BDL	5.0
		Dibromomethane	BDL	5.0
		Bromodichloromethane	BDL	5.0
		2-Chloroethylvinylether	BDL	5.0
		cis-1,3-Dichloropropene	BDL	5.0
		4-Methyl-2-pentanone	BDL	5.0
		Toluene	BDL	5.0
		trans-1,3-Dichloropropene	BDL	5.0
		1,1,2-Trichloroethane	BDL	5.0
		Ethylmethacrylate	BDL	5.0
		Tetrachloroethene	BDL	5.0
		1,3-Dichloropropane	BDL	5.0



# GeoChem Incorporated Certified Analytical Laboratory

Site Name:  
S. Blount St.

NC # 37745 , NC # 336, EPA ID # 155  
Tuesday, August 26, 2003

GCI Project # 0308-003

Field ID	Exp. Bottom	Lab ID 968		
	Dry wt %	81.3	Date Analyzed: 8/8/03	Conc. in ug/kg
				PQL in ug/kg
			2-Hexanone	BDL 10.1
			Chlorodibromomethane	BDL 5.0
			1,2-Dibromoethane	BDL 5.0
			Chlorobenzene	BDL 5.0
			1,1,1,2-Tetrachloroethane	BDL 5.0
			Ethylbenzene	BDL 5.0
			m,p-Xylene	BDL 5.0
			o-Xylene	BDL 5.0
			Styrene	BDL 5.0
			Bromoform	BDL 5.0
			Isopropylbenzene	BDL 5.0
			Bromobenzene	BDL 5.0
			1,2,3-Trichloropropane	BDL 5.0
			1,1,2,2-Tetrachloroethane	BDL 5.0
			n-Propylbenzene	BDL 5.0
			2-Chlorotoluene	BDL 5.0
			1,4-Dichloro-2-butene	BDL 5.0
			4-Chlorotoluene	BDL 5.0
			1,3,5-Trimethylbenzene	BDL 5.0
			tert-Butylbenzene	BDL 5.0
			1,2,4-Trimethylbenzene	18.0 5.0
			sec-Butylbenzene	BDL 5.0
			1,3-Dichlorobenzene	BDL 5.0
			1,4-Dichlorobenzene	BDL 5.0
			4-Isopropyltoluene	BDL 5.0
			1,2-Dichlorobenzene	BDL 5.0
			1,2-Dibromo-3-chloropropan	BDL 5.0
			1,2,4-Trichlorobenzene	BDL 5.0
			Naphthalene	10.6 5.0
			Hexachlorobutadiene	BDL 5.0
			1,2,3-Trichlorobenzene	BDL 5.0

End of 8260 soil

# GeoChem Incorporated Certified Analytical Laboratory

NC # 37745 , NC # 336, EPA ID # 155

Tuesday, August 26, 2003

GCI Project 0308-003

Site Name:

S. Blount St.

Conc. in mg/kg

PQL in mg/kg

Field ID West Wall-S

Lab ID 963

Date Extracted: 8/6/03

Date Analyzed: 8/6/03

Dry Wt %: 0.82

Analysis: EPH soil

C9-C18 Aliphatics 13

12

C19-C36 Aliphatics BDL

12

C11-C22 Aromatics BDL

12

Field ID North Wall

Lab ID 964

Date Extracted: 8/6/03

Date Analyzed: 8/6/03

Dry Wt %: 0.77

Analysis: EPH soil

C9-C18 Aliphatics 475

13

C19-C36 Aliphatics 14

13

C11-C22 Aromatics 65

13

Field ID South Wall

Lab ID 967

Date Extracted: 8/6/03

Date Analyzed: 8/6/03

Dry Wt %: 0.84

Analysis: EPH soil

C9-C18 Aliphatics BDL

12

C19-C36 Aliphatics BDL

12

C11-C22 Aromatics BDL

12

# GeoChem Incorporated Certified Analytical Laboratory

NC # 37745 , NC # 336, EPA ID # 155

Tuesday, August 26, 2003

GCI Project 0308-003

Site Name:

S. Blount St.

Conc. in mg/kg

PQL in mg/kg

Field ID West Wall-N

Lab ID 962

Date Extracted:

Date Analyzed: 8/5/03

Dry Wt %: 0.83

VPH soil

C5-C8 Aliphatics	BDL	12.064
C9-C12 Aliphatics	BDL	12.064
C9-C10 Aromatics	BDL	12.064

Field ID West Wall-S

Lab ID 963

Date Extracted:

Date Analyzed: 8/5/03

Dry Wt %: 0.82

VPH soil

C5-C8 Aliphatics	BDL	12.258
C9-C12 Aliphatics	BDL	12.258
C9-C10 Aromatics	BDL	12.258

Field ID North Wall

Lab ID 964

Date Extracted:

Date Analyzed: 8/5/03

Dry Wt %: 0.77

VPH soil

C5-C8 Aliphatics	106.0	13.015
C9-C12 Aliphatics	242.1	13.015
C9-C10 Aromatics	144.7	13.015

Field ID East Wall-N

Lab ID 965

Date Extracted:

Date Analyzed: 8/5/03

Dry Wt %: 0.8

VPH soil

C5-C8 Aliphatics	BDL	12.476
C9-C12 Aliphatics	BDL	12.476
C9-C10 Aromatics	BDL	12.476

Field ID East Wall-S

Lab ID 966

Date Extracted:

Date Analyzed: 8/5/03

Dry Wt %: 0.8

VPH soil

C5-C8 Aliphatics	BDL	12.473
C9-C12 Aliphatics	BDL	12.473
C9-C10 Aromatics	BDL	12.473

# GeoChem Incorporated Certified Analytical Laboratory

NC # 37745 , NC # 336, EPA ID # 155

GCI Project 0308-003

Tuesday, August 26, 2003

Site Name:

S. Blount St.

Conc. in mg/kg

PQL in mg/kg

Field ID South Wall

Lab ID 967

Date Extracted:

Date Analyzed: 8/5/03

Dry Wt %: 0.84

VPH soil

C5-C8 Aliphatics BDL

11.931

C9-C12 Aliphatics BDL

11.931

C9-C10 Aromatics BDL

11.931

Field ID Exp. Bottom

Lab ID 968

Date Extracted:

Date Analyzed: 8/5/03

Dry Wt %: 0.81

VPH soil

C5-C8 Aliphatics BDL

12.295

C9-C12 Aliphatics BDL

12.295

C9-C10 Aromatics BDL

12.295

# GeoChem Incorporated Quality Control Results

NC # 37745 , NC # 336, EPA ID # 155

GCI Project # 0308-003

Tuesday, August 26, 2003

			<i>lowest detection @ ideal conditions</i>
	Percent Recovery	Lab Blank:	MDL. in ug/l
<b>8270 BN soil</b>			
1,4-Dichlorobenzene	103	0	2.96
n-Nitrosodipropylamine	98	0	4.77
1,2,4-Trichlorobenzene	91	0	2.68
Acenaphthene	107	0	6.83
2,4-Dinitrotoluene	103	0	2.48
Pyrene	136	0	3.34
<i>End of 8270 BN soil</i>			

			<i>lowest detection @ ideal conditions</i>
	Percent Recovery	Lab Blank:	MDL. in ug/l
<b>8260 soil</b>			
1,1-Dichloroethene	107	0	0.88
Benzene	101	0	0.72
Trichloroethene	100	0	0.71
Toluene	99	0	0.64
Chlorobenzene	96	0	0.49
<i>End of 8260 soil</i>			

# ***GeoChem Incorporated Quality Control Results***

***NC # 37745 , NC # 336, EPA ID # 155***

***Tuesday, August 26, 2003***

**0308-003**

<b>EPH soil</b>	<b>Percent Recovery</b>	<b>MDL in mg/kg</b>
C9-C18 Aliphatics	<b>75</b>	1.17
C19-C36 Aliphatics	<b>82</b>	1.71
C11-C22 Aromatics	<b>115</b>	1.01

# EPH Calibration and QA/QC

Lab Certification #: 336

Calibration date: 10/15/2002

## Calibration Ranges and Limit

Range	MDL H2O / Soil	RL H2O / Soil
C9-C18 Aliphatics	0.04 mg/l / 0.49 mg/kg	0.10 mg/l / 10 mg/kg
C19-C36 Aliphatics	0.07 mg/l / 0.89 mg/kg	0.10 mg/l / 10 mg/kg
C11-C22 Aromatics	0.09 mg/l / 1.70 mg/kg	0.17 mg/l / 10 mg/kg

## Calibration Concentration Levels

Range	Levels	% RSD
C9-C18 Aliphatics Ave RF 9.17E-07	0.03 ug/ul	1.60
	0.15 ug/ul	
	0.30 ug/ul	
	0.45 ug/ul	
	0.60 ug/ul	
C19-C36 Aliphatics Ave RF 9.81E-07	0.04 ug/ul	3.10
	0.20 ug/ul	
	0.40 ug/ul	
	0.60 ug/ul	
	0.80 ug/ul	
C11-C22 Aromatics Ave RF 4.94E-07	0.085 ug/ul	10.09
	0.42 ug/ul	
	0.85 ug/ul	
	1.27ug/ul	
	1.70 ug/ul	

## Calibration

Check Std Date 08-06-2003

Range	RPD
C9-C18 Aliphatics	2.55
C19-C36 Aliphatics	9.35
C11-C22 Aromatics	19.76

# ***GeoChem Incorporated Surrogate Results***

NC # 37745 , NC # 336, EPA ID # 155

Thursday, August 28, 2003

**GCI Project # 0308-003**

**Test Name:** EPH soil

**Lab ID:** 963

**Surrogate Recovery:**

Terphenyl	113
Fluorobiphenyl	125
Chlorooctadecane	110
Bromonaphthalene	140

**Lab ID:** 964

**Surrogate Recovery:**

Terphenyl	89
Fluorobiphenyl	98
Chlorooctadecane	103
Bromonaphthalene	109

**Lab ID:** 967

**Surrogate Recovery:**

Terphenyl	82.9
Fluorobiphenyl	89.8
Chlorooctadecane	85.4
Bromonaphthalene	104



# ***GeoChem Incorporated Quality Control Results***

***NC # 37745 , NC # 336, EPA ID # 155***

***0308-003***

***Tuesday, August 26, 2003***

<b>VPH soil</b>	<b><i>Percent Recovery</i></b>	<b><i>MDL in mg/kg</i></b>
C5-C8 Aliphatics	<b>94.5</b>	0.013
C9-C12 Aliphatics	<b>95.1</b>	0.004
C9-C10 Aromatics	<b>99.7</b>	0.003

# ***VPH Calibration and QA/QC***

Lab Certification #: 336

Calibration date: 3/21/2003

## **Calibration Ranges and Limit**

<b>Range</b>	<b>MDL H<sub>2</sub>O / Soil</b>	<b>RL H<sub>2</sub>O / Soil</b>
<b>C5-C8 Aliphatics</b>	0.013 mg/l / 0.13 mg/kg	0.50 mg/l / 10 mg/kg
<b>C9-C12 Aliphatics</b>	0.004 mg/l / 0.04 mg/kg	0.50 mg/l / 10 mg/kg
<b>C9-C10 Aromatics</b>	0.003 mg/l / 1.03 mg/kg	0.50 mg/l / 10 mg/kg

## **Calibration Concentration Levels**

<b>Range</b>	<b>Levels</b>	<b>% RSD</b>
<b>C5-C8 Aliphatics</b> Ave RF 9.23E-06	0.024 mg/l	4.39
	0.12 mg/l	
	0.60 mg/l	
	2.4 mg/l	
	6.0 mg/l	
<b>C9-C12 Aliphatics</b> Ave RF 9.40E-06	0.02 mg/l	8.82
	0.1 mg/l	
	0.50 mg/l	
	2.0 mg/l	
	5.0 mg/l	
<b>C9-C10 Aromatics</b> Ave RF 3.99E-06	0.004 mg/l	5.34
	0.02 mg/l	
	0.10 mg/l	
	0.40 mg/l	
	1.0 mg/l	

## **Calibration**

Check Std Date 08/05/2003

<b>Range</b>	<b>RPD</b>
<b>C5-C8 Aliphatics</b>	14.83
<b>C9-C12 Aliphatics</b>	15.33
<b>C9-C10 Aromatics</b>	22.12

# GeoChem Incorporated Surrogate Results

NC # 37745 , NC # 336, EPA ID # 155

Thursday, August 07, 2003

GCI Project # 0308-003

Test Name: VPH soil

Lab ID: 962

Bromofluorobenzene-PID

Surrogate Recovery:

82.2

Bromofluorobenzene-FID

81.8

Lab ID: 963

Bromofluorobenzene-PID

Surrogate Recovery:

81.2

Bromofluorobenzene-FID

82.1

Lab ID: 964

Bromofluorobenzene-PID

Surrogate Recovery:

90

Bromofluorobenzene-FID

99.8

Lab ID: 965

Bromofluorobenzene-PID

Surrogate Recovery:

80.7

Bromofluorobenzene-FID

87.7

Lab ID: 966

Bromofluorobenzene-PID

Surrogate Recovery:

80.8

Bromofluorobenzene-FID

80

Lab ID: 967

Bromofluorobenzene-PID

Surrogate Recovery:

96.3

Bromofluorobenzene-FID

83.1

Lab ID: 968

Bromofluorobenzene-PID

Surrogate Recovery:

91

Bromofluorobenzene-FID

87.9

# CAROLINA ENVIRONMENTAL LABORATORIES, LLC

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## FINAL REPORT OF ANALYSES

Earthtec Environmental, Inc.  
Attn: Scott Keller  
PO Box 130  
Sanford, NC 27331-0130

PROJECT NAME: RaleighGeologix  
REPORT DATE: 08/06/03

SAMPLE NUMBER- 43819    SAMPLE ID- CRAL-2  
DATE SAMPLED- 07/30/03  
DATE RECEIVED- 07/30/03    SAMPLER- Scott Keller  
TIME RECEIVED- 1437    DELIVERED BY- Scott Keller

SAMPLE MATRIX- SO  
TIME SAMPLED- 1344  
RECEIVED BY- hcg

Page 1 of 1

ANALYSIS	METHOD	SAMPLE PREP ANALYSIS			RESULT UNITS	L
		DATE	BY DATE	BY		
TCLP Lead	1311/7420	07/31/03	ERP 08/01/03	ERP	0.01113 mg/L	0.01

LRL = Lower Reporting Limit

Results are reported on a "dry weight" basis

LABORATORY DIRECTOR 

## **APPENDIX H**

### **Photographs of UST Closure Activities**





**Uncovering/Pumping Out Contents of 1,000-Gallon Used Oil UST**



**Removing 1,000-Gallon Used Oil UST**





**Holes/Pitting at One End of 1,000-Gallon Used Oil UST**



**Tops of Two 2,000-Gallon Gasoline USTs are Uncovered**





**One of the 2,000-Gallon Gasoline USTs is Removed From Excavation**



**Holes are Indicated in Bottom of One of the 2,000-Gallon Gasoline USTs**





**Former Location of the Two 2,000-Gallon USTs**



**A 275-Gallon Kerosene (?) UST is Discovered in Excavation Near E. Cabarrus St.**





**View of Excavation at Former Location of Used Oil UST - Note Dark, Contaminated Soil**



**Contaminated Soil is Removal Where 2,000-Gallon Gasoline USTs and Dispenser Island Were Located**





**Excavation is Completed in Northern Region of Tract - Facing North Toward E. Cabarrus St.**



**Clean Fill Material Used to Backfill Excavation**





**Excavation Brought Back Up to Near Grade**



**View of Site After Completion of Excavation Backfilling**



## **APPENDIX I**

### **Geologic Logs for Excavation/Borings**

**No excavation borings were conducted/No geological logs were kept**